					DEPARTMENT						AMENI	FC DED REPOR	RM 3		
		AF	PLICATION FO	OR PERMI	IT TO DRILL					1. WELL NAME and NU		921-36P1	BS		
2. TYPE O	F WORK	DRILL NEW WELL	REENTER	P&A WELL		WELL (3. FIELD OR WILDCAT NATURAL BUTTES								
4. TYPE O	F WELL	G	as Well Co	nalhed Meth	nane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME						1E		
6. NAME (F OPERATOR		KERR-MCGEE OIL					7. OPERATOR PHONE 720 929-6515							
8. ADDRE	SS OF OPERAT		P.O. Box 173779							9. OPERATOR E-MAIL	_	anadarko	com		
	AL LEASE NUM		1.0. Box 17377	11. MI	NERAL OWNERS	450				12. SURFACE OWNER	SHIP		_		
		ML 22265 OWNER (if box 12	- 'fee'\	FEDI	ERAL IND	IAN ()	STATE () FEE	2	FEDERAL INI	DIAN ()	(if box 12		EE(_)	
										`					
15. ADDR	ESS OF SURFA	CE OWNER (if box	12 = 'fee')							16. SURFACE OWNER	R E-MAIL	(If box 12	: = 'fee')		
	N ALLOTTEE O = 'INDIAN')	R TRIBE NAME		MULTI	TEND TO COMM	NS		_		19. SLANT					
							ng Applicatio				RECTION		HORIZON		
	ATION OF WELL			FOOTAGE			R-QTR	SECTIO	ON .	TOWNSHIP		ANGE	ME	ERIDIAN	
	N AT SURFACE			FSL 1021			ESE	36		9.0 S		I.0 E		S	
Top of Uppermost Producing Zone 1243 FSL 493 FEL At Total Depth 1243 FSL 493 FEL							ESE	36		9.0 S	21.0 E			S	
							ESE LINE (F-	36		9.0 S		1.0 E	<u> </u>	S	
UINTAH							3			23. NUMBER OF ACRI	63 63		11		
25. DISTANCE TO NEAREST (Applied For Drilling or Co								POOL		26. PROPOSED DEPTI MD:		TVD: 104	34		
27. ELEVATION - GROUND LEVEL 28. BOND NUMBER 5013 22							542			29. SOURCE OF DRIL WATER RIGHTS APPR		MBER IF A	PPLICAB	LE	
					Hole, Casing	, and Ce	ement Infor	mation							
String Surf	Hole Size	Casing Size 8.625	0 - 2540	Weight 28.0	Grade & T		Max Mud					Yield 1.15	Weight 15.8		
Suri	12.25	0.025	0 - 2540	20.0	J-55 L1	αυ	0.2			- 21			1.15	15.8	
Prod	7.875	4.5	0 - 10581	11.6	HCP-110	LT&C	13.	0	Pre	mium Lite High Stre	ngth	310	3.38	12.0	
										50/50 Poz 1550 1.31 14.					
					А	TTACHN	MENTS								
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RU								L RULES							
WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER							COMP	LETE DRILL	LING PI	_AN					
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)							FORM	5. IF OPER	ATOR I	S OTHER THAN THE LE	EASE OW	NER			
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)							торос	RAPHICAL	MAP						
NAME D	anielle Piernot			TITLE Re	egulatory Analys	t		PHON	NE 720	929-6156					
SIGNATU	IRE			DATE 12	2/21/2011			EMAII	L danie	lle.piernot@anadarko.d	com				
	BER ASSIGNED 04752247(APPROV	/AL			7	Bol	Defill					
									Perm	it Manager					

Morgan State 921-36P Pad Drilling Program

Kerr-McGee Oil & Gas Onshore. L.P.

MORGAN STATE 921-36P1BS

Surface: 440 FSL / 1021 FEL SESE BHL: 1243 FSL / 493 FEL SESE

Section 36 T9S R21E

Unitah County, Utah Mineral Lease: ML-22265

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2.a <u>Estimated Tops of Important Geologic Markers</u>: <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
10.	0 0 0	
Uinta	0 - Surface	
Green River	1,300'	
Birds Nest	1,589'	Water
Mahogany	2,087'	Water
Wasatch	4,520'	Gas
Mesaverde	7,156'	Gas
Sego	9,337'	Gas
Castlegate	9,402'	Gas
MN5	9,834'	Gas
TVD =	10,434'	
TD =	10,581'	

2.c Kerr McGee Oil & Gas Onshore LP (Kerr McGee) will either drill to the the Blackhawk formation, which is part of the Mesaverde formation, or the Wasatch/Mesaverde formation. If Kerr McGee drills to the Blackhawk formation (part of the Mesaverde formation), please refer to MN5 as the bottom formation. The attached Blackhawk Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the deeper formation.

If Kerr McGee drills to the Wasatch/Mesaverde formation please refer to Sego as the bottom formation. The attached Wasatch/Mesaverde Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the depths the Wasatch/Mesaverde formations are found.

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

1 of 9

API Well Number: 43047522470000

Morgan State 921-36P Pad Drilling Program 2 of 9

4. <u>Proposed Casing & Cementing Program:</u>

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

5. <u>Drilling Fluids Program</u>:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

6. <u>Evaluation Program</u>:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

7. <u>Abnormal Conditions</u>:

7.a Blackhawk (Part of Mesaverde Formation) Target Formation

Maximum anticipated bottom hole pressure calculated at 10434' TVD, approximately equals 6,886 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,639 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

7.b Wasach/Mesaverde Target Formation

Maximum anticipated bottom hole pressure calculated at 9337' TVD, approximately equals 5,976 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,908 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

Morgan State 921-36P Pad

Drilling Program

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Morgan State 921-36P Pad Drilling Program

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

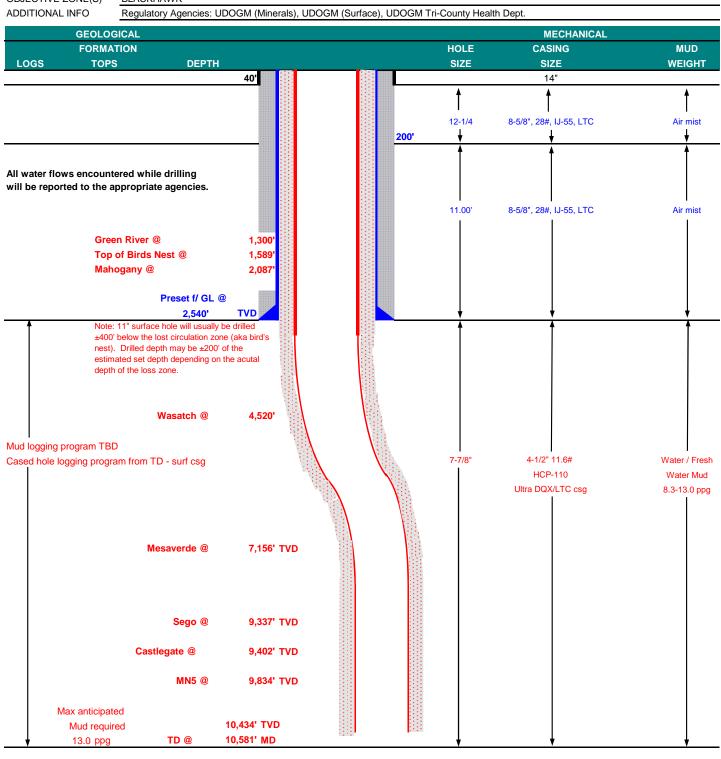
Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

4 of 9



KERR-McGEE OIL & GAS ONSHORE LP BLACKHAWK DRILLING PROGRAM

COMPANY NAME KER	R-McGEE OIL &	GAS ONSHORE	LP		DATE	December	19, 2011		
WELL NAME MO	RGAN STAT	E 921-36P1B	921-36P1BS			10,434'	TVD	10,581' MD	
FIELD Natural Butte	S	COUNTY Uintah STATE Utah			h	FINIS	SHED ELEVATION _	5,010'	
SURFACE LOCATION	SESE	440 FSL	1021 FEL	Sec 36	T 9S	R 21E			
	Latitude:	39.986582	Longitude	: -109.49	3622		NAD 27		
BTM HOLE LOCATION	SESE	1243 FSL	493 FEL	Sec 36	T 9S	R 21E			
	Latitude:	39.988755	Longitude	: -109.49	1737		NAD 27		
OBJECTIVE ZONE(S)	BLACKHAWK						_		
ADDITIONAL INFO	Regulatory Age	encies: UDOGM (Minerals), UDC	GM (Surface	e). UDOG	M Tri-County F	lealth Dept.		





KERR-McGEE OIL & GAS ONSHORE LP **BLACKHAWK DRILLING PROGRAM**

CASING PROGRAM	<u> </u>	DESIGN FACTORS									
_										LTC	DQX
	SIZE	INT	INTERVAL			GR.	CPLG.	BURST	COLLAPSE	TE	ENSION
CONDUCTOR	14"	C	0-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,540	28.00	IJ-55	LTC	2.12	1.58	5.59	N/A
								10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.23		3.73
	4-1/2"	5,000	to	10,581'	11.60	HCP-110	LTC	1.19	1.23	5.38	

Surface Casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

9000 0.66 psi/ft = bottomhole gradient (Burst Assumptions: Pressure test with 8.4ppg @

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	•	YIELD				
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15				
Option 1		+ 0.25 pps flocele									
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15				
		+ 2% CaCl + 0.25 pps flocele									
SURFACE	NOTE: If well will circulate water to surface, option 2 will be utilized										
Option 2 LEAD	2,040'	65/35 Poz + 6% Gel + 10 pps gilsonite	190	35%	11.00		3.82				
		+ 0.25 pps Flocele + 3% salt BWOW									
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15				
		+ 0.25 pps flocele									
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15				
PRODUCTION LEAD	4,011'	Premium Lite II +0.25 pps	310	35%	12.00		3.38				
		celloflake + 5 pps gilsonite + 10% gel									
		+ 0.5% extender									
TAIL	6,570'	50/50 Poz/G + 10% salt + 2% gel	1,550	35%	14.30		1.31				
		+ 0.1% R-3									

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys	will b	oe take	n at	1,000'	minimum	intervals.

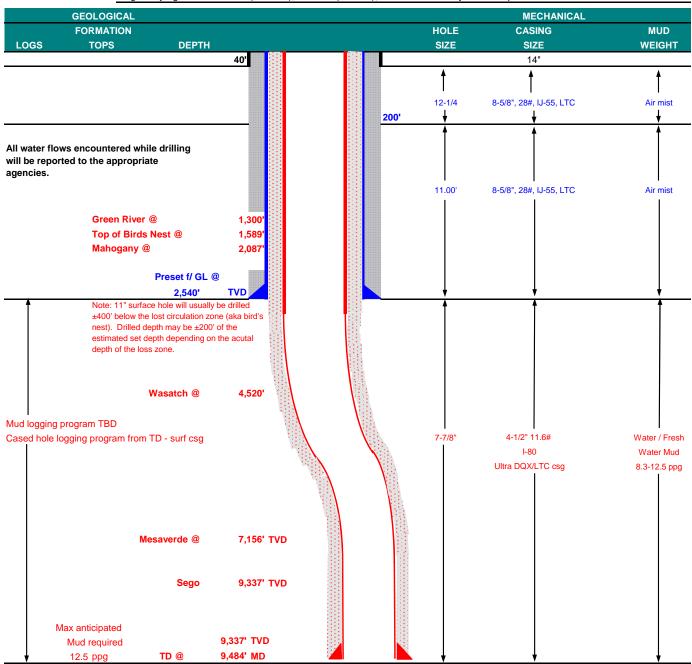
	Most rigs have PVT System for mud	monitoring. If no PVT is available, visual monitoring will be utilize	1.	
DRILLING	ENGINEER:		DATE:	
		Nick Spence / Danny Showers / Chad Loesel		
DRILLING	SUPERINTENDENT:		DATE:	
		Kenny Gathings / Lovel Young		

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained



KERR-McGEE OIL & GAS ONSHORE LP WASATCH/MESAVERDE DRILLING PROGRAM

			<u>WAS/</u>	<u> ATCH/IVI</u>	<u>ESAV</u>	<u>EKL</u>	JE DRIL	<u>LING PR</u>	<u>UGRAM</u>	
COMPANY NAI	ME KER	R-McGEE OIL	. & GAS ONSHORI	E LP		DATE	December	19, 2011		
WELL NAME	МО	RGAN STA	TE 921-36P1E	S		TD	9,337'	TVD	9,484' MD	
FIELD Nat	ural Butte	COUNTY Uintah STATE Uta					FINIS	HED ELEVATION_	5,010'	
SURFACE LOC	CATION	SESE	440 FSL	1021 FEL	Sec 36	T 9S	R 21E			
		Latitude:	39.986582	Longitude:	-109.493	3622		NAD 27		
BTM HOLE LO	CATION	SESE	1243 FSL	493 FEL	Sec 36	T 9S	R 21E			
		Latitude:	39.988755	Longitude:	-109.49	1737		NAD 27		
OBJECTIVE ZO	ONE(S)	Wasatch/Me	saverde					_		
ADDITIONAL IN	NFO	Regulatory A	gencies: UDOGM	(Minerals), UDC	GM (Surfa	ce), UDO	GM Tri-County	Health Dept.		
	GEOLOG	ICAL						MECH	HANICAL	
	FORMAT	TION					HOLE	CASIN	G	MUD
LOGS	TOPS	;	DEPTH				SIZE	SIZE		WEIGHT
			40'					14"		





KERR-McGEE OIL & GAS ONSHORE LP

WASATCH/MESAVERDE DRILLING PROGRAM

CASING PROGRAM	<u>1</u>	<u></u>							DESIGN FACTORS			
										LTC	DQX	
	SIZE	INT	INTERVAL			GR.	CPLG.	BURST	COLLAPSE	TE	NSION	
CONDUCTOR	14"	(0-40'									
								3,390	1,880	348,000	N/A	
SURFACE	8-5/8"	0	to	2,540	28.00	IJ-55	LTC	2.12	1.58	5.59	N/A	
								7,780	6,350		267,035	
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	1.05		3.00	
								7,780	6,350	223,000		
	4-1/2"	5,000	to	9,484'	11.60	I-80	LTC	1.11	1.05	5.30		

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD						
SURFACE LEAF	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15						
Option 1		+ 0.25 pps flocele										
TOP OUT CMT (6 jobs	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15						
		+ 2% CaCl + 0.25 pps flocele										
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized										
Option 2 LEAI	2,040'	65/35 Poz + 6% Gel + 10 pps gilsonite	190	35%	11.00	3.82						
		+ 0.25 pps Flocele + 3% salt BWOW										
TAI	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15						
		+ 0.25 pps flocele										
TOP OUT CM	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15						
PRODUCTION LEAF	4,014'	Premium Lite II +0.25 pps	310	35%	12.00	3.38						
		celloflake + 5 pps gilsonite + 10% gel										
		+ 0.5% extender										
TAI	5,470'	50/50 Poz/G + 10% salt + 2% gel	1,290	35%	14.30	1.31						
		+ 0.1% R-3										

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

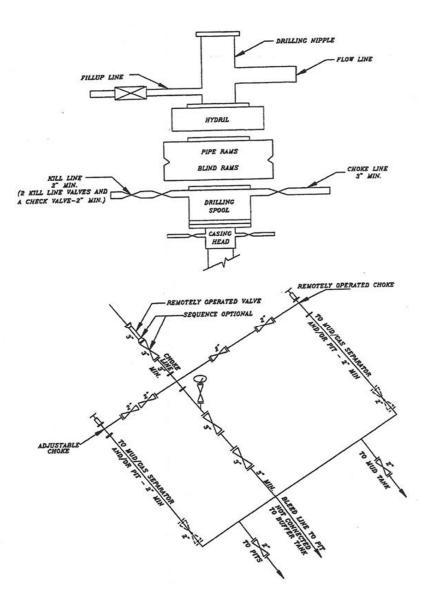
Surveys will be taken at 1,000' minimum intervals	s.
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Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

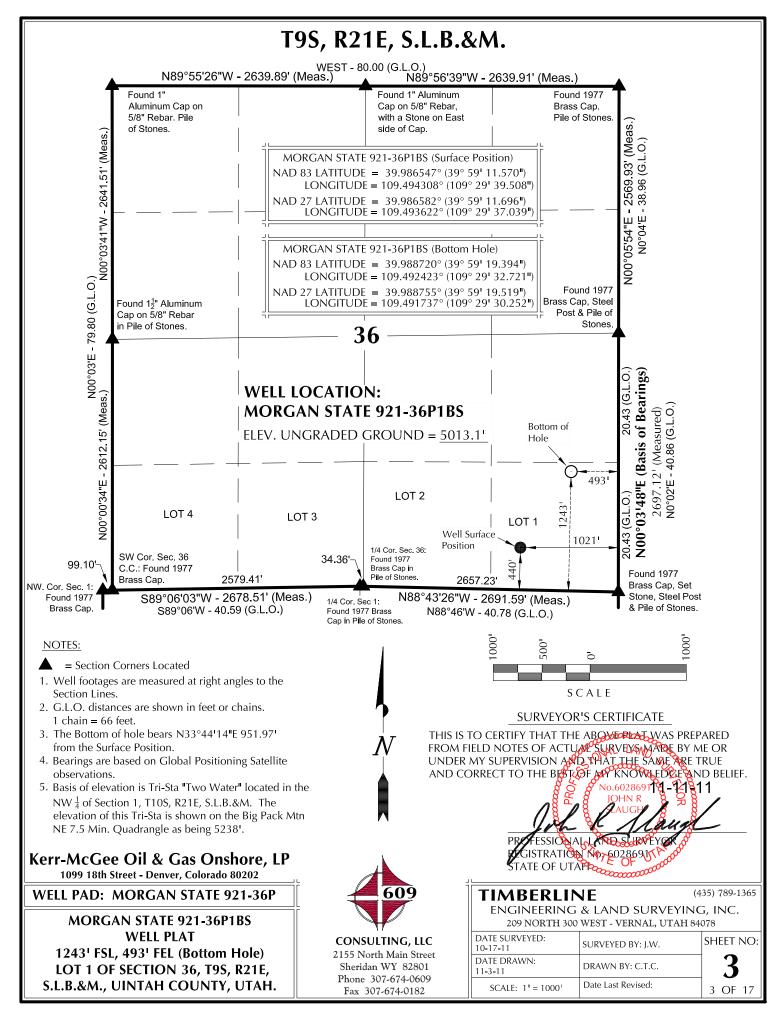
	WOST HIGS HAVE FVT System for HI	uu monitoning. Ii no F v i is avallable, visual monitoning will be t	Julizeu.	
DRILLING	ENGINEER:		DATE:	
		Nick Spence / Danny Showers / Chad Loesel	_	
DRILLING	SUPERINTENDENT:		DATE:	
		Kenny Gathings / Lovel Young	_	

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

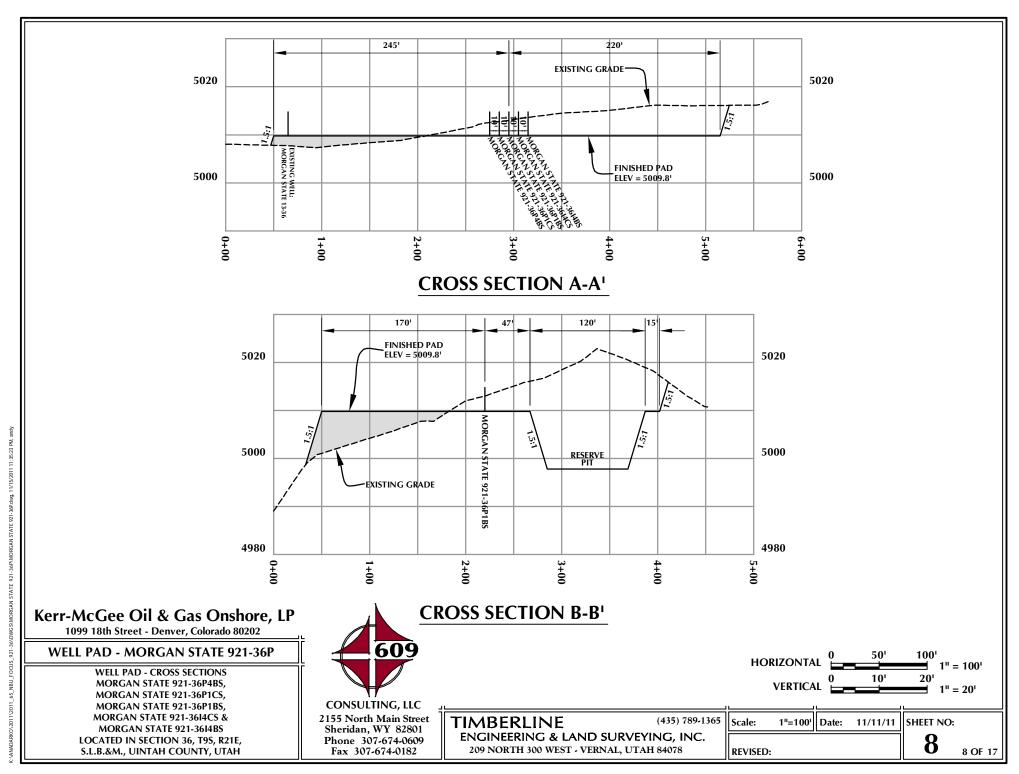
EXHIBIT A
MORGAN STATE 921-36P1BS

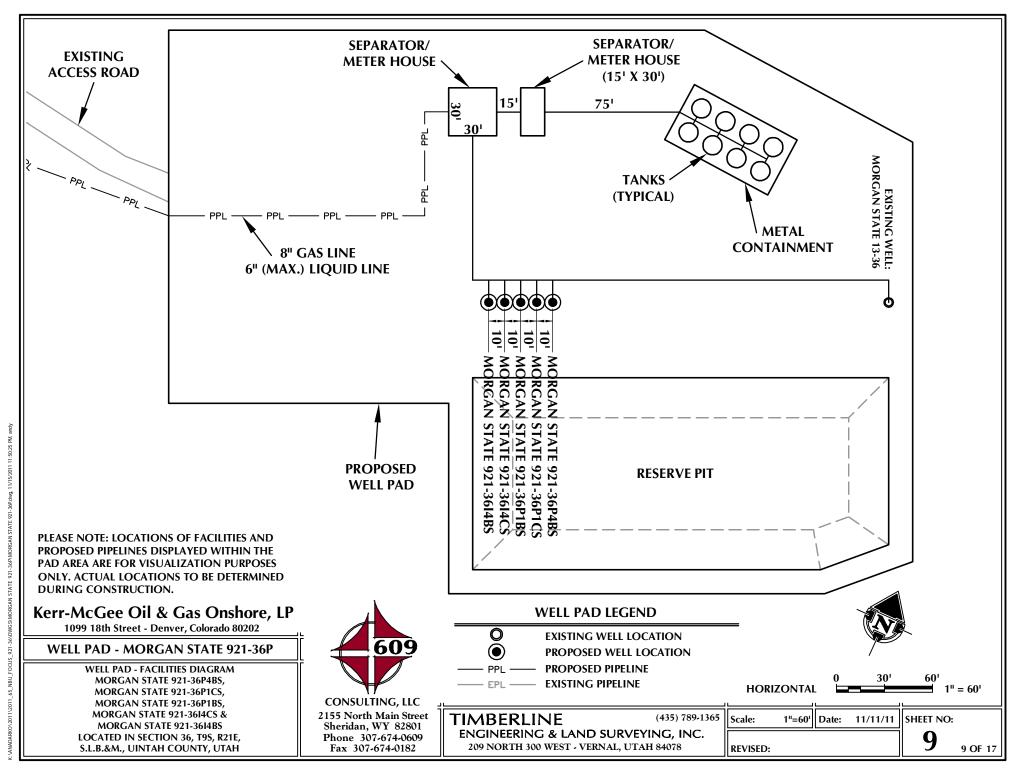


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



	SU	JRFACE POSIT	TION					E	BOTTOM HOLE		
	D83		NAD27				NAD		NAD		
MORGAN STATE 39°59'11.652	LONGITUDE 109°29'39.275	_			FOOTAGES 449¹ FSL	39°59'1		LONGITUDE 109°29'32.741"	39°59'12.968"	LONGITUDE 109°29'30.271"	FOOTAGES 580' FSL
921-36P4BS 39.986570°	109.494243°	39.986605°	109.493	557°	10031 FEL	39.9869	01°	109.492428°	39.986935°	109.491742°	494' FEL
MORGAN STATE 39°59'11.612 921-36P1CS 39.986559°	" 109°29'39.392 109.494276°	39°59'11.73 39.986594°			444' FSL 1012' FEL	39°59'1 39.9878		109°29'32.737" 109.492427°	39°59'16.239" 39.987844°	109°29'30.268" 109.491741°	911' FSL 494' FEL
MORGAN STATE 39°59'11.570	" 109°29'39.508	39°59'11.69	96" 109°29':	37.039"	440' FSL	39°59'1	9.394"	109°29'32.721"	39°59'19.519"	109°29'30.252"	1243' FSL
921-36P1BS 39.986547° MORGAN STATE 39°59'11.529	109.494308° " 109°29'39.626	39.986582° 39°59'11.65			1021' FEL 436' FSL	39.9887 39°59'2:		109.492423° 109°29'32.718"	39.988755° 39°59'22.790"	109.491737° 109°29'30.248"	493' FEL 1574' FSL
921-3614CS 39.986536°	109.494340°	39.986571°	109.493	655°	1030' FEL	39.9896	529°	109.492422°	39.989664°	109.491736°	493' FEL
MORGAN STATE 39°59'11.488 921-3614BS 39.986525°	" 109°29'39.742 109.494373°	39°59'11.61 39.986559°			431' FSL 1039' FEL	39°59'2. 39.9905		109°29'32.714" 109.492421°	39°59'26.061" 39.990573°	109°29'30.245" 109.491735°	1905' FSL 493' FEL
MORGAN 39°59'12.514	" 109°29'36.822	" 39°59'12.64	40" 109°29':	34.352"	540' FSL			1001102121	1	103.131733	.55 122
STATE 13-36 39.986810°	109.493562°	39.986844°			812' FEL From Surface	Position	to Potte	om Holo			
WELL NAME NORTH	EAST W	ELL NAME	NORTH	EAS		NAME	NOR		WELL NAM	1E NORTH	EAST
MORGAN STATE 120.2	EOO OI MC	DRGAN STATE	455.4'	518.3	MORG/ 921-36	AN STATE	791.		MORGAN STA	1126.91	538.21
WELL NAME NORTH	EAST 921	1-36P1C5			921-361	7185			921-3614CS		
MORGAN STATE 921-3614BS 1462.1	547.7'									1	
	Z Z Z	P.T. 10 Exist. N.H.=65, 482/6, 230.0, MORCA				35, 425,53,000, 15,000, 10,000	- /	7.48.79, 10(e) /	»/ <u>-</u>	_	
	O Exist M. C.	N. 10 Exist. N.H. 65, 481 00° 250.0 NORCE. N. 10 Exist. N.H. 65, 481 30° 250.0 NORCE.			53472° HOLE	1561.30,	31/481/	10 80 1 248; 10 80 1 10 10 10 10 10 10 10 10 10 10 10 10	,	λ	
		1821 0 139° 05. 18139°	761,00,000		/To Bottom Hole?	;		TO BOTTON HE AND THE A			
		250.0 4	NOR		/ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	1. 1.55 1.53 1.53	\$ \\\ \\	/ A 10361° 689.) EXISTI	ING WELL:	~ /////////////////////////////////////
) T	ORGA	ST ST ST	755	/ \ / / . / /		/ AZ:	10 80 100 110 110 110 110 110 110 110 11) MORO	GAN STATE	13-36
	v I		AK ST		3. / /	/ //	. 17:	=76.70472	. 83'		
30,		.09	1.361	368/85	368485		(To	2'17"E - 52' Bottom Ho			
S C A	L E			10	10' 10' 10'		/				· ·
S65°25° AZ=2	3.47"N 45.47972°)'				\		THE SE ¼ OF S S.L.B.&M. WH GLOBAL POS	RINGS IS THE ECTION 36, TS IICH IS TAKEN ITIONING SAT NS TO BEAR N	FROM ELLITE	
Kerr-McGee Oil o	enver, Colorado	80202	P ≓⊧				1				
	ERFERENCE PLAT	Г			609		H		IG & LAND	4) SURVEYINC RNAL, UTAH 84)	·
WELLS: MORGAN MORGAN STATE 921-36P1CS MORGAN STATE 921-36I4CS LOCATED IN SEC	, MORGAN STAT & MORGAN STA	TE 921-36P1B9 ATE 921-36I4B	الف	2155 No	J LTING, LL orth Main Stream WY 8280	eet	10-17 DATE	E SURVEYED: 7-11 E DRAWN:	SURVEYED B	BY: J.W.	SHEET NO:
S.L.B.&M., UINTA					iii w 1 - 6260 307-674-060		11-3-		Date Last Rev		U
				Fax 3	07-674-0182		S	CALE: 1" = 60'	Date Last Key	viacu.	6 OF 17





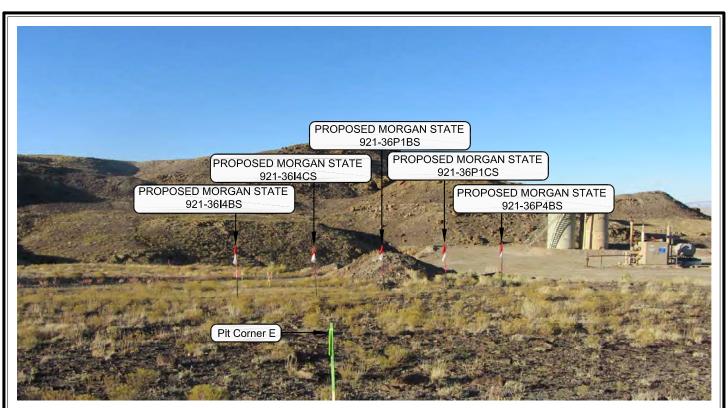


PHOTO VIEW: FROM PIT CORNER E TO LOCATION STAKE





PHOTO VIEW: EXISTING ACCESS ROAD

CAMERA ANGLE: EASTERLY

Kerr-McGee Oil & Gas Onshore, LP

1099 18th Street - Denver, Colorado 80202

WELL PAD - MORGAN STATE 921-36P

LOCATION PHOTOS MORGAN STATE 921-36P4BS, MORGAN STATE 921-36P1CS, MORGAN STATE 921-36P1BS, MORGAN STATE 921-36I4CS & MORGAN STATE 921-36I4BS LOCATED IN SECTION 36, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC Sheridan WY 82801

2155 North Main Street Phone 307-674-0609 Fax 307-674-0182

T	IMBERLINE	
	ENICHMEEDING OF	

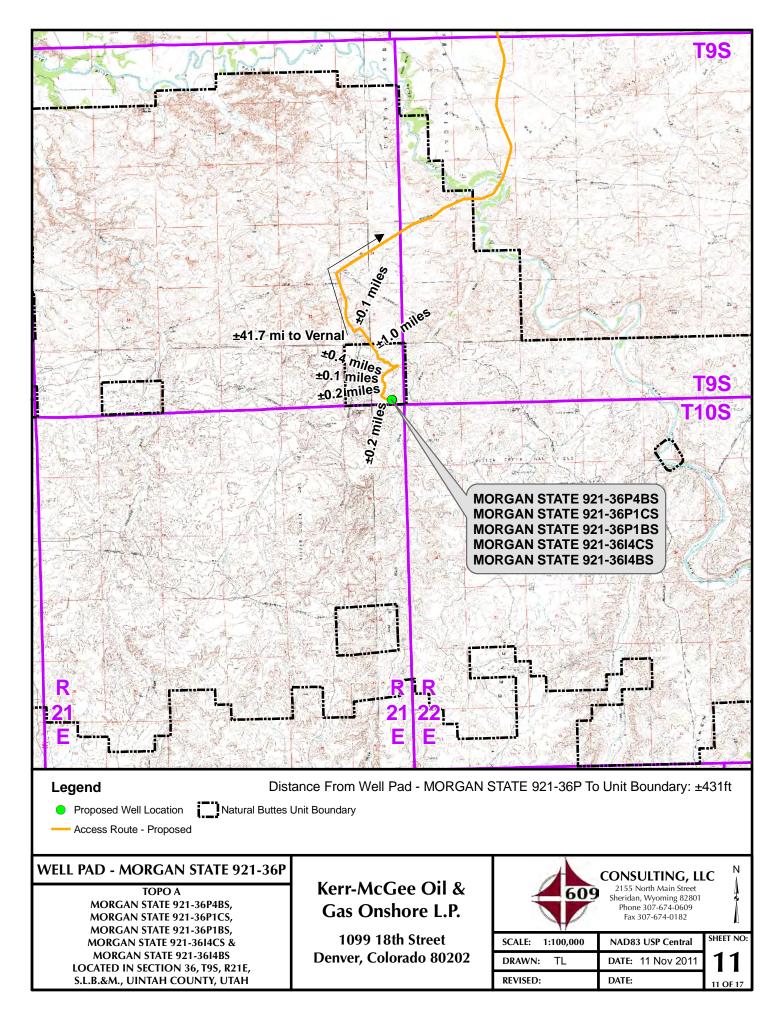
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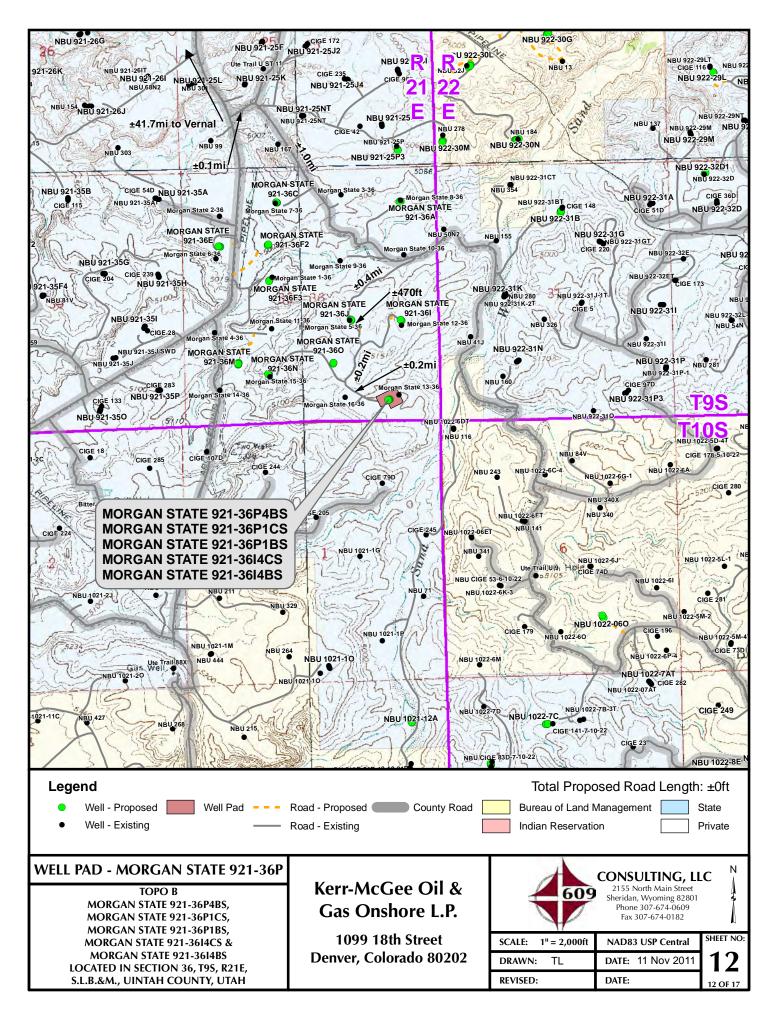
(435) 789-1365

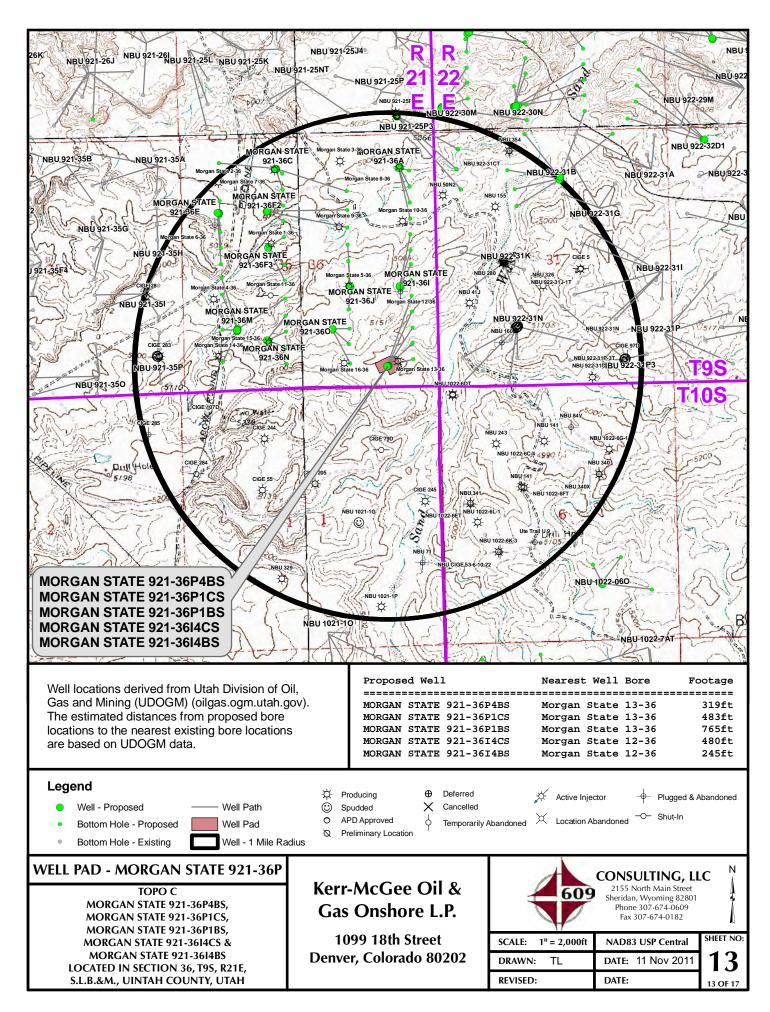
10 OF 17

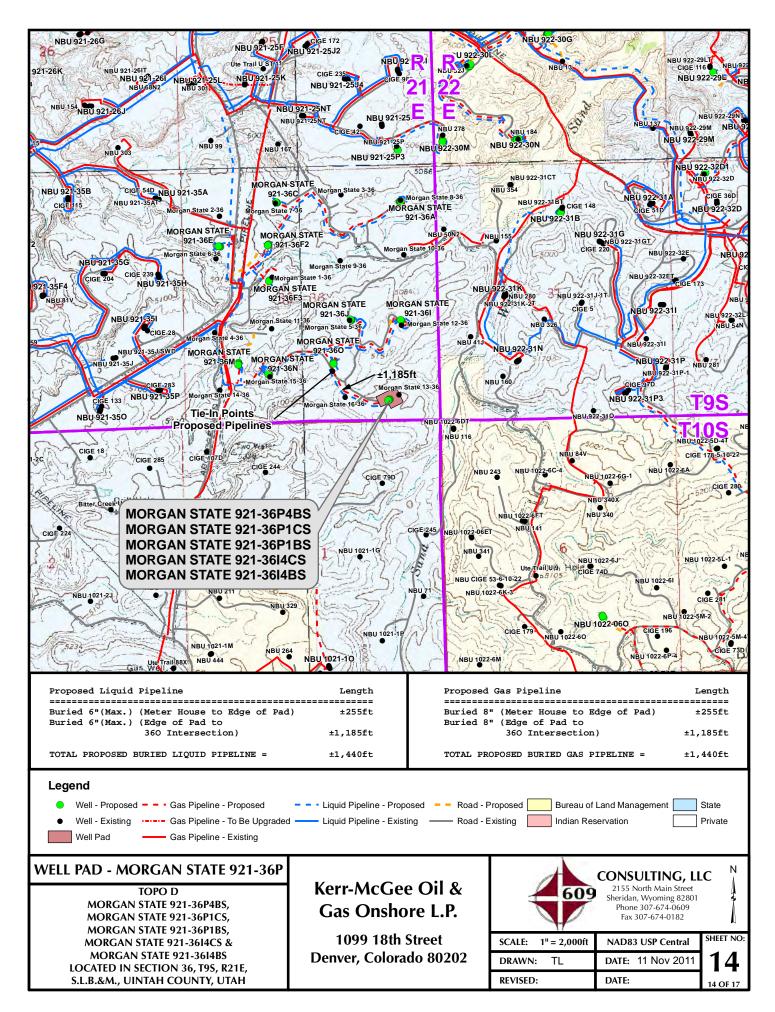
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

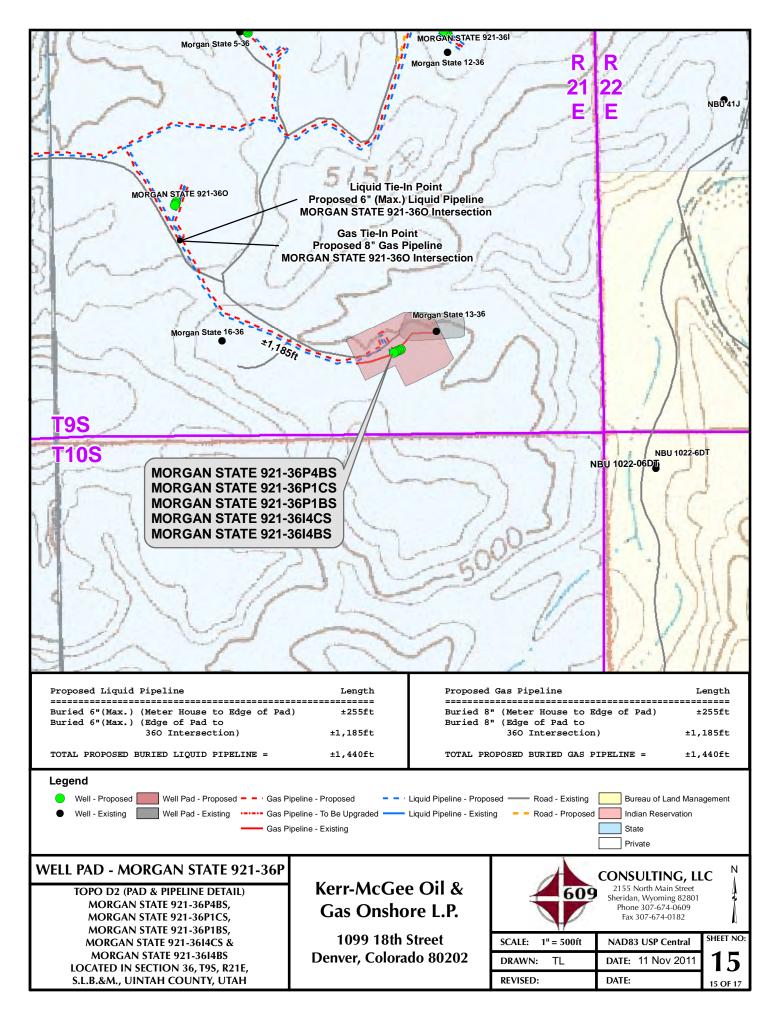
20711011111300	WEST - VERTILL, CITITO	0,0
DATE PHOTOS TAKEN: 10-17-11	PHOTOS TAKEN BY: J.W.	SHEET NO:
DATE DRAWN: 11-3-11	DRAWN BY: C.T.C.	10

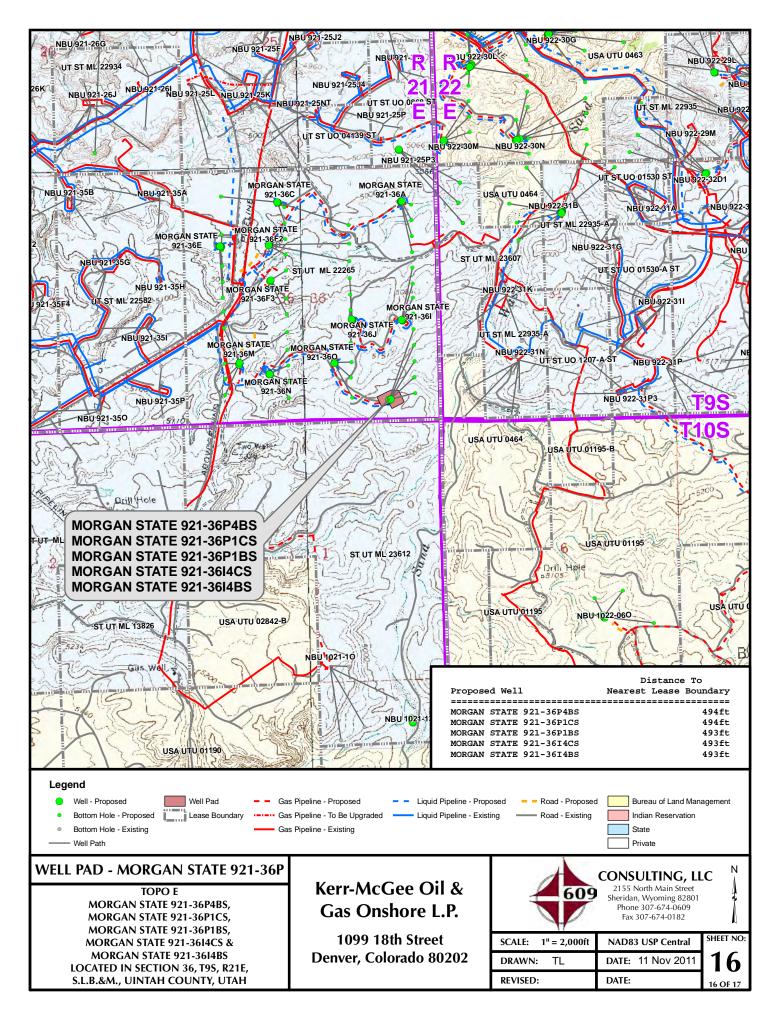












Kerr-McGee Oil & Gas Onshore, LP WELL PAD – MORGAN STATE 921-36P WELLS – MORGAN STATE 921-36P4BS, MORGAN STATE 921-36P1CS, MORGAN STATE 921-36P1BS, MORGAN STATE 921-36I4CS & MORGAN STATE 921-36I4BS Section 36, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.2 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.1 miles to a second Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along the second Class D County Road approximately 1.0 miles to a service road to the southwest. Exit right and proceed in a southwesterly direction approximately 0.4 miles to the proposed MORGAN STATE 921-36J well pad. Proceed in a southeasterly direction approximately 470 feet through the proposed MORGAN STATE 921-36J well pad to a second service road to the south. Proceed in a southerly direction along the second service road approximately 0.2 miles to a third service road to the southeast. Exit left and proceed in a southeasterly direction approximately 0.2 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 43.7 miles in a southerly direction.

SHEET 17 OF 17

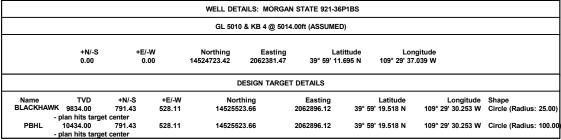
API Well Number: 43047 52024 TO OUTAB - UTM (feet), NAD27, Zone 12N

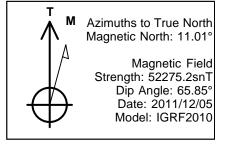
Site: MORGAN STATE 921-36P PAD Well: MORGAN STATE 921-36P1BS

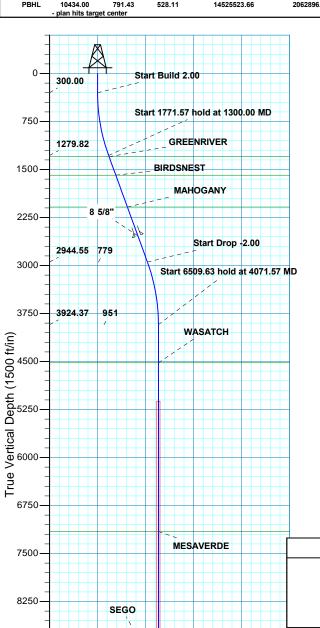
Wellbore: OH

Design: PLAN #1 PRELIMINARY









9000

9750

10500

11250

-750

BLACKHAWK

10434.00

CASTLEGATE

750

TD at 10581.21

2250

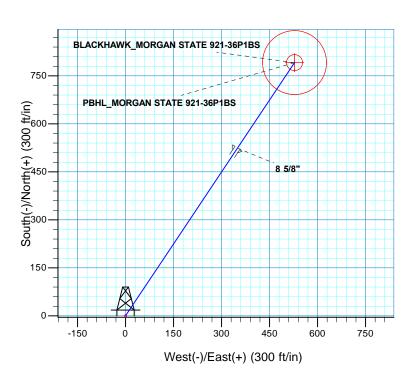
3000

1500

Vertical Section at 33.71° (1500 ft/in)

Scientific Drilling

Rocky Mountain Operations



				SECT	ION DETAI	LS			
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
1300.00	20.00	33.71	1279.82	143.71	95.90	2.00	33.71	172.77	
3071.57	20.00	33.71	2944.55	647.72	432.21	0.00	0.00	778.68	
4071.57	0.00	0.00	3924.37	791.43	528.11	2.00	180.00	951.45	PBHL_MORGAN STATE 921-36P1BS
10581.21	0.00	0.001	0434.00	791.43	528.11	0.00	0.00	951.45	T BITE_MOROAN OTATE SET-OUT IBO

FORMATION TOP DETAILS PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N Formation GREENRIVER BIRDSNEST **TVDPath** MDPath 1300.00 Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 (NADCON CONUS) 1589 00 1629.03 2087.00 4520.00 2158.99 4667.21 MAHOGANY Ellipsoid: Clarke 1866 Zone: Zone 12N (114 W to 108 W) Location: SECTION 36 T9S R21E WASATCH 7156.00 9337.00 7303.21 9484.21 MESAVERDE SEGO System Datum: Mean Sea Level 9402.00 9549.21 CASTLEGATE 9834.00 BLACKHAWK

CASING DETAILS

TVD 2537.00 MD 2637.87 Name Size 8 5/8" 8.625

> Plan: PLAN #1 PRELIMINARY (MORGAN STATE 921-36P1BS/OH) Created By: RobertScott Date: 10:17, December 05 2011

RECEIVED:

API Well Number: 43047522470000



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N MORGAN STATE 921-36P PAD MORGAN STATE 921-36P1BS

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

05 December, 2011



API Well Number: 43047522470000



SDIPlanning Report



Database: EDM5000-RobertS-Local Company: US ROCKIES REGION P

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N MORGAN STATE 921-36P PAD

Site:MORGAN STATE 921-36P PADWell:MORGAN STATE 921-36P1BS

Wellbore: OH

Project:

Geo Datum: Map Zone:

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MORGAN STATE 921-36P1BS

GL 5010 & KB 4 @ 5014.00ft (ASSUMED) GL 5010 & KB 4 @ 5014.00ft (ASSUMED)

True

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

NAD 1927 (NADCON CONUS) Zone 12N (114 W to 108 W) Mean Sea Level

Site MORGAN STATE 921-36P PAD, SECTION 36 T9S R21E

Northing: 14,524,714.74 usft Site Position: Latitude: 39° 59' 11.612 N From: Lat/Long Easting: 2,062,363.40 usft Longitude: 109° 29' 37.273 W **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.97 13.200 in

System Datum:

Well MORGAN STATE 921-36P1BS, 440 FSL 1021 FEL

 Well Position
 +N/-S
 8.38 ft
 Northing:
 14,524,723.43 usft
 Latitude:
 39° 59' 11.695 N

 +E/-W
 18.21 ft
 Easting:
 2,062,381.46 usft
 Longitude:
 109° 29' 37.039 W

Position Uncertainty 0.00 ft Wellhead Elevation: Ground Level: 5,010.00 ft

Wellbore ОН Field Strength Magnetics **Model Name** Sample Date Declination Dip Angle (nT) (°) (°) IGRF2010 2011/12/05 11.01 65.85 52,275

PLAN #1 PRELIMINARY Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 33.71

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	33.71	1,279.82	143.71	95.90	2.00	2.00	0.00	33.71	
3,071.57	20.00	33.71	2,944.55	647.72	432.21	0.00	0.00	0.00	0.00	
4,071.57	0.00	0.00	3,924.37	791.43	528.11	2.00	-2.00	0.00	180.00	
10,581.21	0.00	0.00	10,434.00	791.43	528.11	0.00	0.00	0.00	0.00 F	BHL_MORGAN STA



SDIPlanning Report



Database: EDM5000-RobertS-Local Company: US ROCKIES REGION PLANNING

 Project:
 UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 MORGAN STATE 921-36P PAD

 Well:
 MORGAN STATE 921-36P1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MORGAN STATE 921-36P1BS GL 5010 & KB 4 @ 5014.00ft (ASSUMED) GL 5010 & KB 4 @ 5014.00ft (ASSUMED)

True

ign:	PLAN #1 PRE	LIMINARY							
nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build	2.00								
400.00	2.00	33.71	399.98	1.45	0.97	1.75	2.00	2.00	0.00
500.00	4.00	33.71	499.84	5.80	3.87	6.98	2.00	2.00	0.00
600.00	6.00	33.71	599.45	13.05	8.71	15.69	2.00	2.00	0.00
700.00	8.00	33.71	698.70	23.19	15.47	27.88	2.00	2.00	0.00
800.00	10.00	33.71	797.47	36.20	24.16	43.52	2.00	2.00	0.00
900.00	12.00	33.71	895.62	52.07	34.75	62.60	2.00	2.00	0.00
1,000.00	14.00	33.71	993.06	70.78	47.23	85.10	2.00	2.00	0.00
1,100.00	16.00	33.71	1,089.64	92.31	61.60	110.98	2.00	2.00	0.00
1,200.00	18.00	33.71	1,185.27	116.63	77.83	140.21	2.00	2.00	0.00
1,300.00	20.00	33.71	1,103.27	143.71	95.90	172.77	2.00	2.00	0.00
			1,273.02	140.71	33.30	172.77	2.00	2.00	0.00
	57 hold at 1300.00		4 000 00	4.40.00	00.07	400.44	0.00	0.00	0.00
1,321.48	20.00	33.71	1,300.00	149.82	99.97	180.11	0.00	0.00	0.00
GREENRIV	ER								
1,400.00	20.00	33.71	1,373.78	172.16	114.88	206.97	0.00	0.00	0.00
1,500.00	20.00	33.71	1,467.75	200.61	133.86	241.17	0.00	0.00	0.00
1,600.00	20.00	33.71	1,561.72	229.06	152.85	275.37	0.00	0.00	0.00
	20.00					285.30			
1,629.03		33.71	1,589.00	237.32	158.36	200.30	0.00	0.00	0.00
BIRDSNEST									
1,700.00	20.00	33.71	1,655.69	257.51	171.83	309.58	0.00	0.00	0.00
1,800.00	20.00	33.71	1,749.66	285.96	190.82	343.78	0.00	0.00	0.00
1,900.00	20.00	33.71	1,843.63	314.41	209.80	377.98	0.00	0.00	0.00
2,000.00	20.00	33.71	1,937.60	342.86	228.78	412.18	0.00	0.00	0.00
2,100.00	20.00	33.71	2,031.57	371.31	247.77	446.38	0.00	0.00	0.00
2,158.99	20.00	33.71	2,087.00	388.09	258.97	466.56	0.00	0.00	0.00
MAHOGAN			2,001.00	000.00	200.0.	100.00	0.00	0.00	0.00
WAIIOOAN									
2,200.00	20.00	33.71	2,125.54	399.76	266.75	480.59	0.00	0.00	0.00
2,300.00	20.00	33.71	2,219.51	428.21	285.74	514.79	0.00	0.00	0.00
2,400.00	20.00	33.71	2,313.48	456.66	304.72	548.99	0.00	0.00	0.00
2,500.00	20.00	33.71	2,407.45	485.11	323.70	583.19	0.00	0.00	0.00
2,600.00	20.00	33.71	2,501.42	513.56	342.69	617.39	0.00	0.00	0.00
2.637.87	20.00	33.71	2,537.00	524.33	349.88	630.35	0.00	0.00	0.00
,	20.00	33.71	2,007.00	024.00	J 4 8.00	030.33	0.00	0.00	0.00
8 5/8"	00.00	00.74	2 505 22	F40.04	204.07	054.00	0.00	0.00	0.00
2,700.00	20.00	33.71	2,595.39	542.01	361.67	651.60	0.00	0.00	0.00
2,800.00	20.00	33.71	2,689.35	570.46	380.65	685.80	0.00	0.00	0.00
2,900.00	20.00	33.71	2,783.32	598.91	399.64	720.00	0.00	0.00	0.00
3,000.00	20.00	33.71	2,877.29	627.36	418.62	754.20	0.00	0.00	0.00
3,071.57	20.00	33.71	2,944.55	647.72	432.21	778.68	0.00	0.00	0.00
Start Drop -									
3,100.00	19.43	33.71	2,971.31	655.70	437.53	788.27	2.00	-2.00	0.00
3,200.00	17.43	33.71	3,066.18	681.99	455.08	819.89	2.00	-2.00	0.00
3,300.00	15.43	33.71	3,162.09	705.52	470.78	848.17	2.00	-2.00	0.00
3,400.00	13.43	33.71	3,258.93	726.25	484.61	873.09	2.00	-2.00	0.00
3,500.00	11.43	33.71	3,356.58	744.16	496.56	894.62	2.00	-2.00	0.00
3,600.00	9.43	33.71	3,454.92	759.22	506.61	912.72	2.00	-2.00	0.00
3,700.00	7.43	33.71	3,553.83	771.41	514.75	927.39	2.00	-2.00	0.00
3,800.00	5.43	33.71	3,653.20	780.73	520.97	938.59	2.00	-2.00	0.00
3,900.00	3.43	33.71	3,752.89	787.16	525.25	946.31	2.00	-2.00	0.00
4 000 00	1 // 2	22 71	3 853 80	790.69	527.61	950 56	2.00	-2.00	0.00
4,000.00	1.43	33.71	3,852.80	790.69	527.61	950.56	2.00	-2.00	0.00



SDIPlanning Report



Database: EDM5000-RobertS-Local
Company: US ROCKIES REGION P
Project: UTAH - UTM (feet), NAD2

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N MORGAN STATE 921-36P PAD MORGAN STATE 921-36P1BS

Wellbore: OH

Site:

Well:

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MORGAN STATE 921-36P1BS GL 5010 & KB 4 @ 5014.00ft (ASSUMED) GL 5010 & KB 4 @ 5014.00ft (ASSUMED)

rue

sign:	PLAN #1 PRE	LIMINART							
anned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,071.57	0.00	0.00	3,924.37	791.43	528.11	951.45	2.00	-2.00	0.00
	3 hold at 4071.57								
4,100.00 4,200.00 4,300.00	0.00 0.00 0.00	0.00 0.00 0.00	3,952.79 4,052.79 4,152.79	791.43 791.43 791.43	528.11 528.11 528.11	951.45 951.45 951.45	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
4,400.00 4,500.00 4,600.00 4,667.21	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	4,252.79 4,352.79 4,452.79 4,520.00	791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
WASATCH 4,700.00	0.00	0.00	4,552.79	791.43	528.11	951.45	0.00	0.00	0.00
,									
4,800.00 4,900.00 5,000.00 5,100.00 5,200.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	4,652.79 4,752.79 4,852.79 4,952.79 5,052.79	791.43 791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,300.00 5,400.00 5,500.00 5,600.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	5,152.79 5,252.79 5,352.79 5,452.79	791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
5,700.00	0.00	0.00	5,552.79	791.43	528.11	951.45	0.00	0.00	0.00
5,800.00 5,900.00	0.00 0.00	0.00 0.00	5,652.79 5,752.79	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
6,000.00	0.00	0.00	5,852.79	791.43	528.11	951.45	0.00	0.00	0.00
6,100.00 6,200.00	0.00 0.00	0.00 0.00	5,952.79 6,052.79	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
6,300.00	0.00	0.00	6,152.79	791.43	528.11	951.45	0.00	0.00	0.00
6,400.00	0.00	0.00	6,252.79	791.43	528.11	951.45	0.00	0.00	0.00
6,500.00	0.00	0.00	6,352.79	791.43	528.11	951.45	0.00	0.00	0.00
6,600.00 6,700.00	0.00 0.00	0.00 0.00	6,452.79 6,552.79	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
6,800.00	0.00	0.00	6,652.79	791.43	528.11	951.45	0.00	0.00	0.00
6,900.00	0.00	0.00	6,752.79	791.43	528.11	951.45	0.00	0.00	0.00
7,000.00	0.00	0.00	6,852.79	791.43	528.11	951.45	0.00	0.00	0.00
7,100.00 7,200.00	0.00 0.00	0.00 0.00	6,952.79 7,052.79	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
7,300.00 7,303.21	0.00 0.00	0.00 0.00	7,152.79 7,156.00	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
MESAVERD	E								
7,400.00 7,500.00 7,600.00	0.00 0.00 0.00	0.00 0.00 0.00	7,252.79 7,352.79 7,452.79	791.43 791.43 791.43	528.11 528.11 528.11	951.45 951.45 951.45	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
7,700.00	0.00	0.00	7,552.79	791.43	528.11	951.45	0.00	0.00	0.00
7,800.00 7,900.00	0.00 0.00	0.00 0.00	7,652.79 7,752.79	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
8,000.00 8,100.00	0.00 0.00 0.00	0.00 0.00	7,852.79 7,952.79	791.43 791.43	528.11 528.11	951.45 951.45 951.45	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
8,200.00	0.00	0.00	8,052.79	791.43	528.11	951.45	0.00	0.00	0.00
8,300.00	0.00	0.00	8,152.79	791.43	528.11	951.45	0.00	0.00	0.00
8,400.00	0.00	0.00	8,252.79	791.43	528.11	951.45	0.00	0.00	0.00
8,500.00 8,600.00	0.00 0.00	0.00 0.00	8,352.79 8,452.79	791.43 791.43	528.11 528.11	951.45 951.45	0.00 0.00	0.00 0.00	0.00 0.00
8,700.00	0.00	0.00	8,552.79	791.43	528.11	951.45	0.00	0.00	0.00



SDI Planning Report



Database: Company: Project: EDM5000-RobertS-Local

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N MORGAN STATE 921-36P PAD

Site:MORGAN STATE 921-36P PADWell:MORGAN STATE 921-36P1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MORGAN STATE 921-36P1BS GL 5010 & KB 4 @ 5014.00ft (ASSUMED) GL 5010 & KB 4 @ 5014.00ft (ASSUMED)

True

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,800.00 8,900.00 9,000.00 9,100.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	8,652.79 8,752.79 8,852.79 8,952.79	791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
9,200.00 9,300.00 9,400.00 9,484.21	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	9,052.79 9,152.79 9,252.79 9,337.00	791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
SEGO 9,500.00	0.00	0.00	9,352.79	791.43	528.11	951.45	0.00	0.00	0.00
9,549.21	0.00	0.00	9,402.00	791.43	528.11	951.45	0.00	0.00	0.00
9,600.00 9,700.00 9,800.00 9,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	9,452.79 9,552.79 9,652.79 9,752.79	791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
9,981.21	0.00	0.00	9,834.00	791.43	528.11	951.45	0.00	0.00	0.00
10,000.00 10,100.00 10,200.00 10,300.00	K - BLACKHAW 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	9,852.79 9,952.79 10,052.79 10,152.79	791.43 791.43 791.43 791.43	528.11 528.11 528.11 528.11	951.45 951.45 951.45 951.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
10,400.00 10,500.00 10,581.21	0.00 0.00 0.00	0.00 0.00 0.00	10,252.79 10,352.79 10,434.00	791.43 791.43 791.43	528.11 528.11 528.11	951.45 951.45 951.45	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BLACKHAWK_MORGAI - plan hits target cent - Circle (radius 25.00		0.00	9,834.00	791.43	528.11	14,525,523.67	2,062,896.12	39° 59' 19.518 N	109° 29' 30.253 W
PBHL_MORGAN STATE - plan hits target cent - Circle (radius 100.0		0.00	10,434.00	791.43	528.11	14,525,523.67	2,062,896.12	39° 59' 19.518 N	109° 29' 30.253 W

Casing Points							
	Measured	Vertical			Casing	Hole	
	Depth (ft)	Depth (ft)		Name	Diameter (in)	Diameter (in)	
	2,637.87	2,537.00	8 5/8"		8.625	11.000	

API Well Number: 43047522470000



SDIPlanning Report



Database: Company: Project: Site: EDM5000-RobertS-Local

MORGAN STATE 921-36P1BS

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N MORGAN STATE 921-36P PAD

Wellbore: OH

Design:

Well:

PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MORGAN STATE 921-36P1BS

GL 5010 & KB 4 @ 5014.00ft (ASSUMED) GL 5010 & KB 4 @ 5014.00ft (ASSUMED)

True

tions							
	Measured Depth (ft)	Vertical Depth (ft)	ı	Name	Lithology	Dip (°)	Dip Direction (°)
	1,321.48	1,300.00	GREENRIVER				
	1,629.03	1,589.00	BIRDSNEST				
	2,158.99	2,087.00	MAHOGANY				
	4,667.21	4,520.00	WASATCH				
	7,303.21	7,156.00	MESAVERDE				
	9,484.21	9,337.00	SEGO				
	9,549.21	9,402.00	CASTLEGATE				
	9,981.21	9,834.00	BLACKHAWK				

Plan Annotations							
Measured	Measured Vertical Local Coordinates						
Depth	Depth	+N/-S	+E/-W				
(ft)	(ft)	(ft)	(ft)	Comment			
300.0	0 300.00	0.00	0.00	Start Build 2.00			
1,300.0	0 1,279.82	143.71	95.90	Start 1771.57 hold at 1300.00 MD			
3,071.5	7 2,944.55	647.72	432.21	Start Drop -2.00			
4,071.5	7 3,924.37	791.43	528.11	Start 6509.63 hold at 4071.57 MD			
10,581.2	10,434.00	791.43	528.11	TD at 10581.21			

Surface Use Plan of Operations

Morgan State 921-36I4BS/ 921-36I4CS/ 921-36P1BS/ 921-36P1CS/ 921-36P4BS

1 of 9	
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M	ORGAN STATE 921-3614	BS					
Surface:	431 FSL / 1039 FEL	SESE	Lot 4				
BHL:	1905 FSL / 493 FEL	NESE	Lot				
MORGAN STATE 921-36I4CS							
Surface:	436 FSL / 1030 FEL	SESE	Lot 4				
BHL:	1574 FSL / 493 FEL	NESE	Lot				
MORGAN STATE 921-36P1BS							
Surface:	440 FSL / 1021 FEL	SESE	Lot 4				
BHL:	1243 FSL / 493 FEL	SESE	Lot 4				
MORGAN STATE 921-36P1CS							
Surface:	444 FSL / 1012 FEL	SESE	Lot 4				
BHL:	911 FSL / 494 FEL	SESE	Lot 4				
MORGAN STATE 921-36P4BS							
Surface:	449 FSL / 1003 FEL	SESE	Lot 4				
BHL:	580 FSL / 494 FEL	SESE	Lot 4				

Pad: MORGAN STATE 921-36P PAD

Section 36 T9S R21E Mineral Lease: ML-22265

Uintah County, Utah

Operator: Kerr-McGee Oil & Gas Onshore LP

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including but not limited to, APDs/SULAs/ROEs/ROWs and/or easements.)

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. **Existing Roads**:

Existing roads consist of county and improved/unimproved lease roads. KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

No new access road is proposed. (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

If there are roads that are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

During the onsite, turnouts, major cut and fills, culverts, bridges, gates, cattle guards, low water crossings, or modifications needed to existing infrastructure/facilities were determined, as applicable, are typically shown on attached Exhibits and Topo maps.

C. Location of Existing and Proposed Facilities:

This pad will expand the existing pad for the Morgan State 13-36. The Morgan State 13-36 well location is a producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of December 5, 2011.

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of the well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) above ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Gathering Facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 1,440$ ' and the individual segments are broken up as follows:

 $\pm 255'$ (0.05 miles) –New 8" buried gas pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

 $\pm 1,185'$ (0.2 miles) –New 8" buried gas pipeline from the edge of pad to the 921-36O intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 1,440$ ' and the individual segments are broken up as follows:

±255' (0.05 miles) –New 6" buried liquid pipeline from the separator to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

 $\pm 1,185'$ (0.2 miles) –New 6" buried liquid pipeline from the edge of pad to the 921-36O intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. KMG requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, KMG requests a temporary 45' construction right-of-way 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity and ownership, as well as to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. Location and Type of Water Supply:

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods for Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Ouray #1 SWD in Sec. 1 T9S R21E NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 33 T9S R21E NBU 921-34L SWD in Sec. 34 T9S R21E

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

Unless otherwise approved, no oil or other oil based drill additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water, biodegradable polymer soap, bentonite clay, and /or non-toxic additives will be used in the system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions, or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum

trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be release into the pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternative is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as the hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods. (e.g. solidification)

Any additional pits necessary for subsequent operations, such as temporary flare pits, or workover pits, will contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of the work.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, including accidental release of fluids, or release in excess of reportable quantities, will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule. Where State wells are participatory to a Federal agreement, according to NTL-3A, the appropriate Federal agencies will be notified.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/ egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1927 (NAD27) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/

completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

Morgan State 921-36I4BS/ 921-36I4CS/ 921-36P1BS/ 921-36P1CS/ 921-36P4BS

Surface Use Plan of Operations 8 of 9

L. Other Information:

None

Morgan State 921-36I4BS/ 921-36I4CS/ 921-36P1BS/ 921-36P1CS/ 921-36P4BS

M. Lessee's or Operators' Representative & Certification:

Danielle Piernot Regulatory Analyst II Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6156 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Danielle Piernot

Date

December 19, 2011

Date



Kerr-McGee Oil & Gas Onshore LP 1999 Broadway, Suite 3700 Denver. CO 80205

December 9, 2011

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE: Exception Location Request

Morgan State 921-36P1BS

T9S-R21E

Section 36: SESE

Surface: 440' FSL, 1021' FEL Bottom Hole: 1243' FSL, 493' FEL

Uintah County, Utah

Dear Mrs. Mason:

Kerr-McGee Oil & Gas Onshore LP has submitted a permit to drill the captioned well to test the Wasatch formation and Mesaverde group. The well is located within the area covered by Cause No. 173-24 which requires that the well be no closer than 460' to any exterior boundary of a committed tract of the Natural Buttes Unit. The surface location for this well is less than 460' from the exterior boundary of a committed tract of the Natural Buttes Unit due to the fact that we are expanding an existing location in order to minimize surface disturbance, and have a limited amount of topographically acceptable surface to utilize. The bottom hole location (and producing zones) for this well will be outside the 460' unit boundary setback. Kerr-McGee owns 100% of the leasehold in the offset lands and has no objection to the exception location.

Kerr-McGee requests your approval of this exception location request. If you have any questions or require any additional information, please do not hesitate to call me at 720-929-6147.

Sincerely,

Joe Matney

Senior Staff Landman



Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

December 14, 2011

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11 Morgan State 921-36P1BS

T9S-R21E

Section 36: SESE (Surface), SESE (Bottom Hole)

Surface: 440' FSL, 1021' FEL Bottom Hole: 1243' FSL, 493' FEL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling.

- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing roads and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

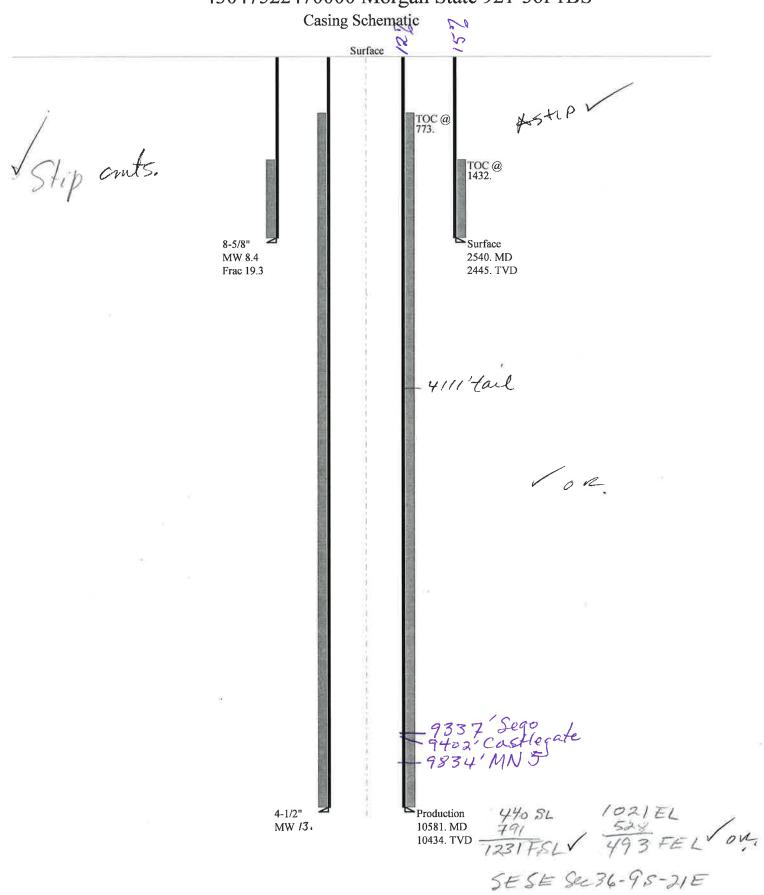
KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney Sr. Staff Landman

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. Morgan State 921-36P1BS 43047522470000

Well Name		KERR-MCGEE C	IL & GAS ONSHO	RE, L.P. Morgan	State 9	21-36P1B	54		
String		Surf	Prod		i II				
Casing Size(")		8.625	4.500		īĒ		1		
Setting Depth (TVD)		2445	10434						
Previous Shoe Setting Dept	h (TVD)	0	2445		i		1		
Max Mud Weight (ppg)		8.3	13.0		i		1		
BOPE Proposed (psi)		500	5000				1		
Casing Internal Yield (psi)		3390	10690						
Operators Max Anticipated	Pressure (psi)	6886	12.7				+		
•		10000	12.7	<u> </u>	1 [! <u></u>				
Calculations		Surf Stri	ng			8.625	"		
Max BHP (psi)		.0	52*Setting D	epth*MW=	1058	5			
					_		ВОРЕ	Ade	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P-(0.12*Setti	ing Depth)=	762		NO		air drill
MASP (Gas/Mud) (psi)		Max BH	P-(0.22*Setti	ing Depth)=	517		NO		Reasonable depth in area
							*Can F	Full 1	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	etting Depth	- Previous Sh	ioe Depth)=	517		NO		
Required Casing/BOPE Tes	st Pressure=				2373	3	psi		
*Max Pressure Allowed @	Previous Casing	Shoe=			0		psi ³	*Ass	umes 1psi/ft frac gradient
Calculations		D J. C4				4.500	,,		
Max BHP (psi)		Prod Stri	52*Setting D	Donth*MW-					
wax biii (psi)		.0	52 Setting L	reptii · M W =	7053	3	ROPE	Ada	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max RH	P-(0.12*Setti	ing Denth)-	-			Aue	quate For Diffing And Setting Casing at Depth.
					1000		NO	_	
MASP (Gas/Mud) (psi)		мах вн	P-(0.22*Setti	ing Depth)=	4758	8	YES T		OK SI
Pressure At Previous Shoe	Mov DUD 22*/S	atting Donth	Dravious Ch	non Donth)-				ull	Expected Pressure Be Held At Previous Shoe?
		etting Deptin	- Flevious Si		5295		NO .		Reasonable
Required Casing/BOPE Tes		a.			5000	0	psi		
*Max Pressure Allowed @	Previous Casing	Shoe=			2445	5	psi '	*Ass	umes 1psi/ft frac gradient
Calculations		String					"		
Max BHP (psi)		.0	52*Setting D	Depth*MW=					
					 -		BOPE	Ade	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P-(0.12*Setti	ing Depth)=			NO		ĺ
MASP (Gas/Mud) (psi)		Max BH	P-(0.22*Setti	ing Depth)=	F		NO	<u>=</u>	
					-		1	full 1	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	etting Depth -	- Previous Sh	noe Depth)=	F		NO	_	
Required Casing/BOPE Tes	st Pressure=				F	=	psi		
*Max Pressure Allowed @	Previous Casing	Shoe=			H		psi '	*Ass	umes 1psi/ft frac gradient
					<u> </u>				
Calculations		String					"		
Max BHP (psi)		.0	52*Setting D	epth*MW=					
							ВОРЕ	Ade	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P-(0.12*Setti	ing Depth)=			NO		
MASP (Gas/Mud) (psi)		Max BH	P-(0.22*Setti	ing Depth)=			NO		
							*Can F	full 1	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	etting Depth	Previous Sh	noe Depth)=			NO		
Required Casing/BOPE Tes	st Pressure=						psi		
*Max Pressure Allowed @	Previous Casing	Shoe=					psi ³	*Ass	umes 1psi/ft frac gradient

43047522470000 Morgan State 921-36P1BS



Well name:

43047522470000 Morgan State 921-36P1BS

Minimum design factors:

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

Project ID:

String type:

Production

43-047-52247

Location:

UINTAH COUNTY

Environment:

Collapse

Design parameters:

Mud weight: 13.000 ppg Internal fluid density: 1.000 ppg Collapse: Design factor

1.125

H2S considered? Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

220 °F 1.40 °F/100ft

Minimum section length:

100 ft

Burst:

Design factor

1.00

Cement top:

773 ft

Burst

Max anticipated surface

pressure: 4,751 psi Internal gradient: 0.220 psi/ft

Calculated BHP 7,046 psi

No backup mud specified.

Tension:

1.80 (J) 8 Round STC: 1.80 (J) 8 Round LTC: 1.60 (J) Buttress:

Premium: 1.50 (J) Body yield: 1.60 (B)

Tension is based on air weight. Neutral point: 8,553 ft

158,889 (\$)

Directional well information:

Kick-off point 300 ft Departure at shoe: 951 ft

Maximum dogleg: 2 °/100ft Inclination at shoe: 0 °

Estimated cost:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
2	5000	4.5	11.60	HCP-110	DQX	4853	5000	3.875	132000
1	5581	4.5	11.60	HCP-110	LT&C	10434	10581	3.875	26889
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2	3025		2.686	5818	10690	1.84	121	367.2	3.03 B
1	6504	8650	1.330	7046	10690	1.52	64.7	279	4.31 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357

FAX: 801-359-3940

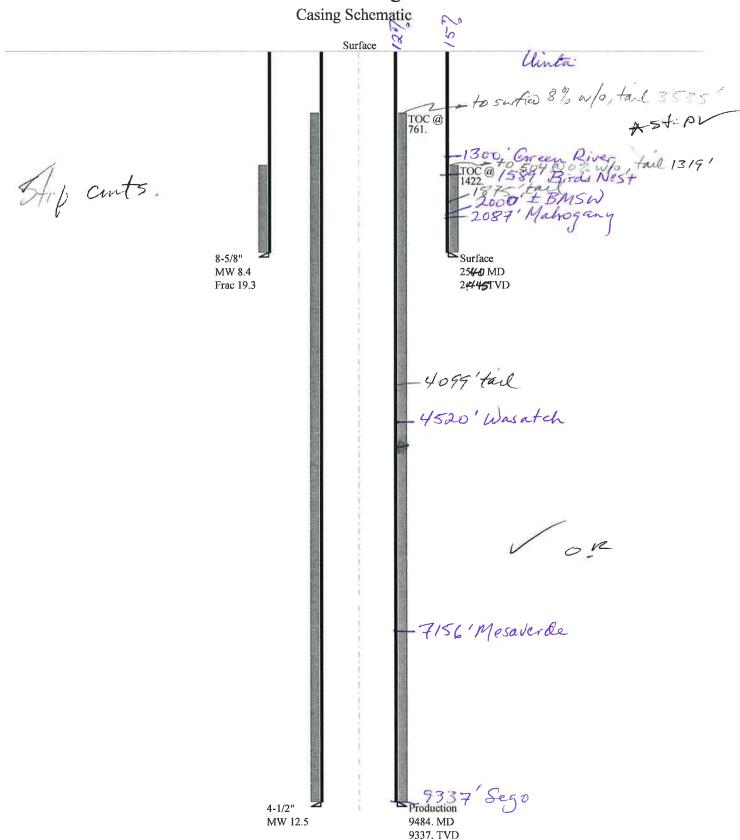
Date: February 15,2012 Salt Lake City, Utah

Collapse is based on a vertical depth of 10434 ft, a mud weight of 13 ppg. An internal gradient of .052 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

43047522470000 Morgan State 921-36P1BS



Well name:

43047522470000 Morgan State 921-36P1BS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Surface

Project ID:

43-047-52247

Location:

UINTAH

Design is based on evacuated pipe.

COUNTY

Minimum design factors: **Environment:**

Collapse

Mud weight:

Design parameters:

8.400 ppg

Collapse: Design factor

1.125

H2S considered? Surface temperature:

No 74 °F 108 °F Bottom hole temperature:

Temperature gradient:

1.40 °F/100ft

Minimum section length:

100 ft

Burst: Design factor

Tension:

1.00

1.80 (J)

1.70 (J)

1.60 (J)

1.50 (J)

1.50 (B)

Cement top:

1,432 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

2,152 psi 0.120 psi/ft

2,445 psi

No backup mud specified.

Buttress: Premium:

Body yield:

8 Round STC:

8 Round LTC:

Tension is based on air weight. Neutral point: 2,218 ft Directional Info - Build & Drop

Kick-off point 300 ft Departure at shoe: 597 ft Maximum dogleg: 2 °/100ft

19.99° Inclination at shoe:

Re subsequent strings:

Next setting depth: 10,438 ft Next mud weight: 13.000 ppg Next setting BHP: 7,049 psi 19.250 ppg Fracture mud wt: 2,445 ft

Fracture depth: Injection pressure: 2,445 psi

Nominal End True Vert Measured Run Segment Drift Est. Length Size Weight **Finish** Depth Depth Diameter Cost Seq Grade (lbs/ft) (in) (ft) (in) (ft) (ft) (\$) 1 2540 28.00 I-55 LT&C 2445 2540 7.892 100584 8.625 Run Collapse Collapse Collapse **Burst** Burst Burst **Tension Tension Tension** Seq Load Strength Design Load Strength Design Load Strength Design (psi) (psi) **Factor** (psi) (psi) **Factor** (kips) (kips) **Factor** 1 1067 1880 1.762 2445 3390 1.39 68.5 348 5.08 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: February 15,2012 Salt Lake City, Utah

Collapse is based on a vertical depth of 2445 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047522450000 Morgan State 921-36O4CS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Production

Project ID:

43-047-52245

Location:

COUNTY **UINTAH**

Environment:

Design parameters:

Collapse

Mud weight: Internal fluid density:

12.500 ppg 1.000 ppg Minimum design factors: Collapse:

Design factor

1.125

H2S considered?

Surface temperature:

74 °F Bottom hole temperature: 205 °F 1.40 °F/100ft Temperature gradient:

Minimum section length:

100 ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1.60 (B)

Cement top:

639 ft

No

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

4.014 psi 0.220 psi/ft 6,071 psi

No backup mud specified.

Tension: 8 Round STC:

8 Round LTC: Buttress:

Premium: Body yield:

Tension is based on air weight. Neutral point:

Directional well information:

Kick-off point 300 ft Departure at shoe: 797 ft Maximum dogleg: 2 °/100ft

Inclination at shoe:

0 °

Estimated cost:

191,004 (\$)

7,723 ft

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Cost (\$)
2	5000	4.5	11.60	1-80	DQX	4880	5000	3.875	132000
1	4470	4.5	11.60	1-80	LT&C	9350	9470	3.875	59004
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
_	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
2	2915	5917	2.030	5088	7780	1.53	108.5	267	2.46 J
1	5586	6360	1.139	6071	7780	1.28	51.9	212	4.09 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357

FAX: 801-359-3940

Date: February 15,2012 Salt Lake City, Utah

Collapse is based on a vertical depth of 9350 ft, a mud weight of 12.5 ppg. An internal gradient of .052 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

From: Jim Davis
To: APD APPROVAL

CC: Danielle Piernot; Julie Jacobson

Date: 2/23/2012 3:22 PM

Subject: APD Approval: the Kerr McGee Morgan State wells

The following wells have been approved by SITLA including arch and paleo clearance.

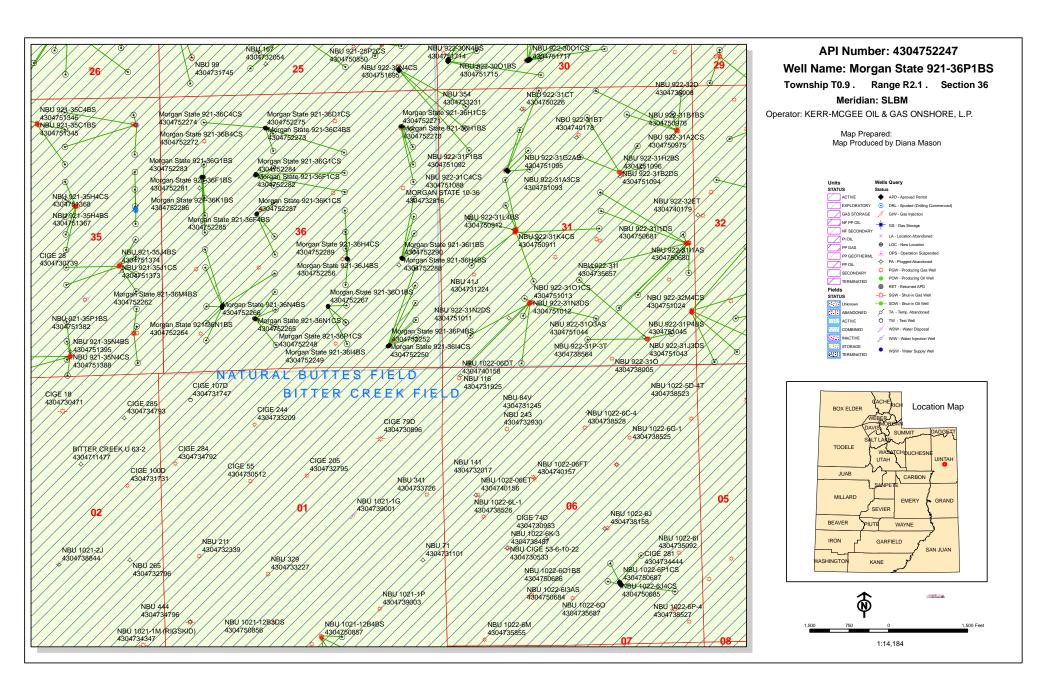
```
Morgan State 921-36G4BS
4304752246
             Morgan State 921-36G4CS
4304752253
4304752255
             Morgan State 921-36J1CS
4304752256
             Morgan State 921-36J4BS
             Morgan State 921-36F1BS
4304752281
4304752282
             Morgan State 921-36F1CS
4304752283
             Morgan State 921-36G1BS
4304752284
             Morgan State 921-36G1CS
             Morgan State 921-36F4BS
4304752285
4304752286
             Morgan State 921-36K1BS
4304752287
             Morgan State 921-36K1CS
             Morgan State 921-36P1BS
4304752247
             Morgan State 921-36P1CS
4304752248
4304752249
             Morgan State 921-36I4BS
             Morgan State 921-36I4CS
4304752250
             Morgan State 921-36P4BS
4304752252
4304752263
             Morgan State 921-36K4CS
4304752264
             Morgan State 921-36N1BS
4304752265
             Morgan State 921-36N1CS
4304752266
             Morgan State 921-36N4BS
4304752276
             Morgan State 921-36D4CS
4304752277
             Morgan State 921-36E1BS
4304752278
             Morgan State 921-36E1CS
             Morgan State 921-36E4BS
4304752279
4304752280
             Morgan State 921-36E4CS
             Morgan State 921-36O4CS
4304752245
             Morgan State 921-36O1CS
4304752254
             Morgan State 921-36O1BS
4304752267
4304752257
             Morgan State 921-36K4BS
4304752258
             Morgan State 921-36L1BS
4304752259
             Morgan State 921-36L1CS
4304752260
             Morgan State 921-36M1BS
4304752261
             Morgan State 921-36M1CS
4304752262
             Morgan State 921-36M4BS
4304752272
             Morgan State 921-36B4CS
4304752273
             Morgan State 921-36C4BS
4304752274
             Morgan State 921-36C4CS
4304752275
             Morgan State 921-36D1CS
```

There are eight more wells on two pads in this section, the 36A pad and the 36I pad, that have not yet been approved. Anadarko is gathering reclamation cost figures on pads similar to those as part of the process of acquiring adequate SITLA bonds.

-Jim

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov

Phone: (801) 538-5156



ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name Morgan State 921-36P1BS

API Number 43047522470000 APD No 5101 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 SESE **Sec** 36 **Tw** 9.0S **Rng** 21.0E 440 FSL 1021 FEL

GPS Coord (UTM) 628553 4427351 Surface Owner

Participants

Sheila Wopsock, Charles Chase, Danielle Piernot, Doyle Holmes, (Anadarko). John Slaugh, Mitch Batty, (Timberline). Jim Davis (SITLA). Alex Hansen (DWR). Chris Jensen and David Hackford, (DOGM).

Regional/Local Setting & Topography

This site is on an existing location, and very little new construction will be necessary.

This location is within the Natural Buttes Unit but this section is not part of the Natural Buttes Unit. It is approximately 14 road miles southeast of Ouray, Utah. The general area is at the head of a long unnamed wash east of Cottonwood Wash. Both washes enter the White River in the same general area, approximately six miles to the north. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws that drain northerly. This unnamed wash is an ephemeral drainage. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. The washes are sometimes rimmed with steep side hills, which have exposed sandstone bedrock cliffs along the rims.

Five new directional wells will be drilled from this location which currently has one well, the Morgan State 13-36. The decision to PA or TA this well has not been made at this time.

Surface Use Plan

Current Surface Use

Grazing Wildlfe Habitat Existing Well Pad

New Road Miles Well Pad Src Const Material Surface Formation

0 Width 332 Length 410 Onsite UNTA

S

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

3/20/2012 Page 1

Prickly pear, wild onion, shadscale, mat saltbrush, Indian ricegrass, halogeton, pepper grass. Principal species present are cheatgrass, black sagebrush, stipa, mesquite grass.

Sheep, antelope, coyote, raptors, small mammals and birds.

Soil Type and Characteristics

Rocky sandy clay loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

Site-Specific Factors	Site Ranking				
Distance to Groundwater (feet)	> 200	0			
Distance to Surface Water (feet)	>1000	0			
Dist. Nearest Municipal Well (ft)	>5280	0			
Distance to Other Wells (feet)		20			
Native Soil Type	Mod permeability	10			
Fluid Type	Fresh Water	5			
Drill Cuttings	Normal Rock	0			
Annual Precipitation (inches)		0			
Affected Populations					
Presence Nearby Utility Conduits	Not Present	0			
	Final Score	35	1 Sensitivity Level		

Characteristics / Requirements

The reserve pit is planned in an area of cut except for 1.6 feet on the east side of pit. The reserve pit will be on the east corner of the location. Dimensions are 260' x 120' x 12' deep with two feet of freeboard. Kerr McGee has agreed to line this pit with a 30 mil synthetic liner and a layer of felt sub-liner, and also place an excess cut stockpile adjacent to and east of the pit where it will be somewhat in fill.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 30 Pit Underlayment Required? Y

Other Observations / Comments

3/20/2012 Page 2

David Hackford 1/11/2012
Evaluator Date / Time

3/20/2012 Page 3

Application for Permit to Drill Statement of Basis

3/20/2012 Utah Division of Oil, Gas and Mining

Page 1

API WellNo Well Type APD No Status Surf Owner CBM

5101 43047522470000 SITLA GW No

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P. Surface Owner-APD

Well Name Morgan State 921-36P1BS Unit

Field NATURAL BUTTES Type of Work **DRILL**

SESE 36 9S 21E S 440 FSL 1021 FEL GPS Coord Location

628567E 4427346N (UTM)

Geologic Statement of Basis

Kerr McGee proposes to set 2,540' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 2,000'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 36. The well is listed as 2,640 feet deep and used for drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect. Any usable ground water.

Brad Hill

2/1/2012

APD Evaluator

Date / Time

Surface Statement of Basis

The general area is in the central portion of the Natural Buttes Unit. Within this area is the White River and rugged drainages that drain into it. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River is six miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43.7 miles to the northwest. Access from Vernal is by following Utah State, Uintah County and oilfield development roads.

Five wells will be directionally drilled from this location. They are the Morgan State 921-36P4BS, Morgan State 921-36P1CS, Morgan State 921-36P1BS, Morgan State 921-36I4CS and the Morgan State 921-36I4BS. The existing location currently has one well. This well is the Morgan State 13-36. The decision to PA or TA this well has not been made at this time. It will be necessary to place an excess cut stockpile along the west side of the reserve pit where the pit is in 1.6 feet of fill. The pad as modified should be stable and sufficient for six wells, and is the best site for a location in the immediate area.

New construction will consist of approximately 240 feet on the south and 210 feet on the west side of the existing location.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA and Alex Hansen with DWR were invited by email to the pre-site evaluation. Both were present. Kerr McGee personnel were told to consult with SITLA for reclamation standards including seeding mixes to be used.

RECEIVED: March 20, 2012

Application for Permit to Drill Statement of Basis

3/20/2012

Utah Division of Oil, Gas and Mining

Page 2

David Hackford 1/11/2012
Onsite Evaluator Date / Time

Conditions of Approval / Application for Permit to Drill

Category Condition

Pits A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed

and maintained in the reserve pit.

Pits The reserve pit should be located on the east side of the location, and an excess cut stockpile shall

be placed on the east side of the pit.

RECEIVED: March 20, 2012

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/21/2011 API NO. ASSIGNED: 43047522470000

WELL NAME: Morgan State 921-36P1BS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SESE 36 090S 210E Permit Tech Review:

> SURFACE: 0440 FSL 1021 FEL Engineering Review:

> **BOTTOM:** 1243 FSL 0493 FEL **Geology Review:**

COUNTY: UINTAH

LATITUDE: 39.98652 LONGITUDE: -109.49415 **UTM SURF EASTINGS: 628567.00** NORTHINGS: 4427346.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ML 22265 PROPOSED PRODUCING FORMATION(S): BLACKHAWK

SURFACE OWNER: 3 - State **COALBED METHANE: NO**

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Bond: STATE/FEE - 22013542 Unit:

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Drilling Unit Oil Shale 190-13

Board Cause No: Cause 173-24 Water Permit: 43-8496

Effective Date: 10/5/2009 **RDCC Review:**

Siting: 460' Fr Exterior Lease Boundary Fee Surface Agreement

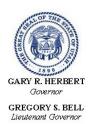
✓ Intent to Commingle R649-3-11. Directional Drill

Commingling Approved

Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 5 - Statement of Basis - bhill 15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - ddoucet



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Morgan State 921-36P1BS

API Well Number: 43047522470000

Lease Number: ML 22265 Surface Owner: STATE Approval Date: 3/20/2012

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-24. The expected producing formation or pool is the BLACKHAWK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-24, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27

pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
 - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
 - Well Completion Report (Form 8) due within 30 days after completion or

Approved By:

For John Rogers Associate Director, Oil & Gas Sundry Number: 27598 API Well Number: 43047522470000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: ML 22265
SUNDR	RY NOTICES AND REPORTS (ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly d reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: Morgan State 921-36P1BS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047522470000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-0	9. FIELD and POOL or WILDCAT: 65NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 6 Township: 09.0S Range: 21.0E Meridia	n: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOF	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
_	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
✓ SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud: 7/3/2012	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
_	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
MIRU TRIPLE A BU RAN 14" 36.7# SC	COMPLETED OPERATIONS. Clearly show a ICKET RIG. DRILLED 20" CONI SHEDULE 10 CONDUCTOR PIF K. SPUD WELL LOCATION ON HRS.	DUCTOR HOLE TO 40'. PE. CEMENT WITH 28	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 11, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBE 720 929-6304	R TITLE Regulartory Analyst	
SIGNATURE N/A		DATE 7/9/2012	

RECEIVED: Jul. 09, 2012

Print Form

BLM - Vernal Field Office - Notification Form

Oper	rator <u>KERR-McGEE OIL & GA</u>	S Rig Name	e/# ROCK	KETRIG
Subr	nitted By J. Scharnowske	Phone Nur	nber <u>720.</u>	929.6304
	Name/Number MORGAN ST			
Qtr/0	Qtr SESE Section 36	Township 9	<u>s</u> R	ange 21E
Leas	e Serial Number ML 22265	·		·
API I	Number <u>4304752247</u>			
-	<u>d Notice</u> – Spud is the initial	spudding o	f the we	ll, not drilling
out b	below a casing string.			
	Date/Time <u>07/03/2012</u>	11:00 HRS	ΔΜ 🗀	РМ 🗍
	Date/ Time <u>07703/2012</u>	11.00 1110		' ' ' '
<u>Casi</u>	<u>ng</u> – Please report time casi s.	ng run start	s, not ce	ementing
	Surface Casing			RECEIVED
Ħ	Intermediate Casing			
	Production Casing			JUL 03 2012
	Liner		DI	V. OF OIL, GAS & MININ
	Other			
	Date/Time <u>07/20/2012</u>	08:00 HRS	AM 🔙	PM
	_			
BOP				
	Initial BOPE test at surface	- -		
	BOPE test at intermediate	casing point		
	30 day BOPE test			
	Other	•		
	Data /Thus		A N .	DM [
	Date/Time		AM []	
Dom	arks estimated date and time. PLEA	SE CONTACT KENN	Y GATHINGS	ΔT
	28.0986 OR LOVEL YOUNG AT 435.781.705	•		<u> </u>

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO zip 80217 Phone Number: (720) 929-6304

Well 1

API Number	Well	Name			Twp	Rng	County
4304752252	Morgan State	921-36P4BS			21E	UINTAH	
Action Code	Current Entity Number	•			Entity Assignment Effective Date		
A	99999	18604		7/3/201	2	7/	18 12012
Comments: MIRU	J TRIPLE A BUCKET F		j	VRD			

SPUD WELL LOCATION ON 7/3/2012 AT 08:30 HRS. BHL: Sese

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County	
4304752247	Morgan State 9	921-36P1BS	1BS SESE 36		6 09S	21E	UINTAH	
Action Code	Current Entity Number	New Entity Number	S	Spud Date		Entity Assignment Effective Date		
A	99999	18599		7/3/2012	2	71	18/2012	
comments: MIRL	TRIPLE A BUCKET RI		r	WRD)			

SPUD WELL LOCATION ON 7/3/2012 AT 12:00 HRS. BHL SESE

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng		County
4304752249	Morgan S	Morgan State 921-36I4BS		36 098		21E UII		UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date			
A	99999	18605		7/3/2012	2	71	18	12012
Comments:								

MIRU TRIPLE A BUCKET RIG.

MURP

SPUD WELL LOCATION ON 7/3/2012 AT 15:00 HRS. BHL: Nese

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
 D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

JUL 11 2012

JAIME SCHARNOWSKE

Name (Please Print)

Signature

REGULATORY ANALYST

6/9/2012

Title

Date

Sundry Number: 29630 API Well Number: 43047522470000

	STATE OF UTAH			
ı	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: ML 22265	
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: MORGAN STATE 921-36P1BS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047522470000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHC n Street, Suite 600, Denver, CO, 80217 377	DNE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NIATUERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SESE Section: 36	STATE: UTAH			
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
SUBSEQUENT REPORT Date of Work Completion:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
	L DEEPEN L	FRACTURE TREAT	NEW CONSTRUCTION	
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
✓ DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
Report Date: 9/5/2012	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION	
9/3/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
	COMPLETED OPERATIONS. Clearly show all per the month of August 2012. W	_	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY September 11, 2012	
Lindsey Frazier	720 929-6857	Regulatory Analyst II		
SIGNATURE N/A		DATE 9/5/2012		

Sundry Number: 29815 API Well Number: 43047522470000

	STATE OF UTAH		FORM 9			
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: ML 22265			
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	posals to drill new wells, significantly deep eenter plugged wells, or to drill horizontal l n for such proposals.		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: MORGAN STATE 921-36P1BS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047522470000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHO n Street, Suite 600, Denver, CO, 80217 377	NE NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 5NIATUERAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL	COUNTY: UINTAH					
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SESE Section: 36	3	STATE: UTAH				
11. CHECH	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
NOTICE OF INTENT Approximate date work will start: SUBSEQUENT REPORT Date of Work Completion:	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS	ALTER CASING CHANGE TUBING COMMINGLE PRODUCING FORMATIONS FRACTURE TREAT	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION			
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	PLUG AND ABANDON RECLAMATION OF WELL SITE SIDETRACK TO REPAIR WELL	☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON			
✓ DRILLING REPORT Report Date: 9/2/2012	☐ TUBING REPAIR ☐ N ☐ WATER SHUTOFF ☐ S	/ENT OR FLARE SI TA STATUS EXTENSION OTHER	WATER DISPOSAL APD EXTENSION OTHER:			
FINISHED DRILLI PRODUCTION CASIN 298 RIG ON 9/2/20 WITH THE WELL O	COMPLETED OPERATIONS. Clearly show all pe NG TO 9510' ON 9/1/2012. RAI G. CEMENTED PRODUCTION CAS 112.DETAILS OF CEMENT JOB W COMPLETION REPORT. WELL IS W COMPLETION ACTIVITIES.	N 4-1/2" 11.6# Î-80 SING. RELEASED H&P /ILL BE INCLUDED VAITING ON FINAL	epths, volumes, etc. Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY September 12, 2012			
NAME (PLEASE PRINT) Cara Mahler	PHONE NUMBER 720 929-6029	TITLE Regulatory Analyst I				
SIGNATURE N/A		DATE 9/7/2012				

Sundry Number: 31650 API Well Number: 43047522470000

	STATE OF UTAH				FORM 9			
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		i	5.LEASE I	DESIGNATION AND SERIAL NUMBER:			
SUNDR	Y NOTICES AND REPORTS	ON	WELLS	6. IF INDIA	AN, ALLOTTEE OR TRIBE NAME:			
	posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NAME:				
1. TYPE OF WELL Gas Well					8. WELL NAME and NUMBER: MORGAN STATE 921-36P1BS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUI 430475	WBER: 22470000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		NE NUMBER: 9 720 929-6	1	and POOL or WILDCAT: IL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL				COUNTY: UINTAH				
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 36 Township: 09.0S Range: 21.0E Meridian: S								
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NA	ATURE OF NOTICE, REPOR	T, OR OT	HER DATA			
TYPE OF SUBMISSION			TYPE OF ACTION					
	ACIDIZE		LTER CASING		CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	□ c	HANGE TUBING		CHANGE WELL NAME			
	CHANGE WELL STATUS	□ c	OMMINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT		NEW CONSTRUCTION			
	OPERATOR CHANGE	P	LUG AND ABANDON		PLUG BACK			
SPUD REPORT	PRODUCTION START OR RESUME	□ R	ECLAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION			
Date of Spud:	REPERFORATE CURRENT FORMATION	□ s	IDETRACK TO REPAIR WELL	TEMPORARY ABANDON				
	TUBING REPAIR	Пи	ENT OR FLARE		WATER DISPOSAL			
DRILLING REPORT Report Date:	WATER SHUTOFF	\Box	I TA STATUS EXTENSION		APD EXTENSION			
11/5/2012				OTHER				
	WILDCAT WELL DETERMINATION		THER					
	COMPLETED OPERATIONS. Clearly show			oil FOR	ccepted by the Utah Division of Gas and Mining RECORD ONLY ovember 05, 2012			
NAME (PLEASE PRINT)	PHONE NUM	BER	TITLE					
Jaime Scharnowske	720 929-6304	DEK	Regulartory Analyst					
SIGNATURE N/A			DATE 11/5/2012					

Sundry Number: 32655 API Well Number: 43047522470000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9		
I	G	5.LEASE DESIGNATION AND SERIAL NUMBER: ML 22265			
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	oposals to drill new wells, significantly dea reenter plugged wells, or to drill horizonta n for such proposals.	epen existing wells below I laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: MORGAN STATE 921-36P1BS				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047522470000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	Ph h Street, Suite 600, Denver, CO, 80217 3	HONE NUMBER: 779 720 929-6	9. FIELD and POOL or WILDCAT: 5NATUERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SESE Section: 3	HIP, RANGE, MERIDIAN: 6 Township: 09.0S Range: 21.0E Meridian:	S	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	ALTER CASING CHANGE TUBING	CASING REPAIR CHANGE WELL NAME		
SUBSEQUENT REPORT Date of Work Completion:	CHANGE WELL STATUS DEEPEN	COMMINGLE PRODUCING FORMATIONS FRACTURE TREAT	CONVERT WELL TYPE NEW CONSTRUCTION		
SPUD REPORT Date of Spud:	OPERATOR CHANGE PRODUCTION START OR RESUME	PLUG AND ABANDON RECLAMATION OF WELL SITE	PLUG BACK RECOMPLETE DIFFERENT FORMATION		
23.0.0.2	REPERFORATE CURRENT FORMATION TUBING REPAIR	SIDETRACK TO REPAIR WELL VENT OR FLARE	TEMPORARY ABANDON WATER DISPOSAL		
DRILLING REPORT Report Date:	□ WATER SHUTOFF □	SI TA STATUS EXTENSION	APD EXTENSION		
12/3/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
Started	COMPLETED OPERATIONS. Clearly show all participations of the well. Well TD	at 9,510.	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY December 03, 2012		
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulartory Analyst			
SIGNATURE N/A		DATE 12/3/2012			

Sundry Number: 33578 API Well Number: 43047522470000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOUF			FORM	9	
1		5.LEASE DESIGNATION AND SERIAL NUMBER ML 22265	R:			
SUNDR	RY NOTICES AND REPORTS	.S	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME:	_				
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: MORGAN STATE 921-36P1BS				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON		9. API NUMBER: 43047522470000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 802	PHONE NUM 17 3779		9. FIELD and POOL or WILDCAT: 5NIATHERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL				COUNTY: UINTAH	_	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 6 Township: 09.0S Range: 21.0E Meri	idian: S		STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE NATURE	OF NOTICE, REPOR	RT, OR OTHER DATA	_	
TYPE OF SUBMISSION		TY	PE OF ACTION			
	ACIDIZE	ALTER CASI	NG	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TU	BING	CHANGE WELL NAME		
	CHANGE WELL STATUS	COMMINGLE	PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE 1	REAT	NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND A	BANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATIO	ON OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION		TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLA		WATER DISPOSAL		
✓ DRILLING REPORT	WATER SHUTOFF		S EXTENSION	APD EXTENSION		
Report Date: 1/3/2013	_	□ SITA STATU	SEXTENSION			
	WILDCAT WELL DETERMINATION	OTHER		OTHER:	_	
	COMPLETED OPERATIONS. Clearly show			Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 04, 2013		
NAME (PLEASE PRINT) Laura Abrams	PHONE NUM 720 929-6356		atory Analyst II			
SIGNATURE		DATE			_	
N/A		1/3/2	UIJ			

Sundry Number: 33996 API Well Number: 43047522470000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOU			FORM	
ι	i	5.LEASE DESIGNATION AND SERIAL NUMBER ML 22265			
SUNDR	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: MORGAN STATE 921-36P1BS				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON		9. API NUMBER: 43047522470000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		NE NUMBER: 9 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0440 FSL 1021 FEL				COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 6 Township: 09.0S Range: 21.0E Mer	idian: S		STATE: UTAH	
11. CHECK	K APPROPRIATE BOXES TO INDIC	ATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME	
	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT	NEW CONSTRUCTION	
	OPERATOR CHANGE	☐ F	PLUG AND ABANDON	PLUG BACK	
SPUD REPORT	✓ PRODUCTION START OR RESUME	□ F	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR		/ENT OR FLARE	WATER DISPOSAL	
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	□ s	SI TA STATUS EXTENSION	APD EXTENSION	
1/17/2013	WILDCAT WELL DETERMINATION		THER	OTHER:	
12. DESCRIBE PROPOSED OR	wildcat well determination COMPLETED OPERATIONS. Clearly sho	w all pe	other rtinent details including dates, d	<u></u>	
	I was placed on productio I History will be submitted report.			Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 25, 2013	
NAME (PLEASE PRINT) Lindsey Frazier	PHONE NUM 720 929-6857	MBER	TITLE Regulatory Analyst II		
SIGNATURE N/A			DATE 1/21/2013		

RECEIVED: Jan. 21, 2013

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

AMENDED REPORT 🗌	FORM 8
(highlight changes)	
5. LEASE DESIGNATION AND SER	IAL NUMBER:
ML 22265	
3. IF INDIAN, ALLOTTEE OR TRIBE	NAME
7. UNIT or CA AGREEMENT NAME	

DIVISION OF OIL, GAS AND MINING										5. LE	(nignlight changes) 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265							
WELI	L COMF	PLETI	ION	OR F	RECO	MPL	.ETIC	N RI	EPOR	T ANI	D LOG					E OR TE	IBE NAME	
1a. TYPE OF WELL: OIL GAS DRY OTHER OTHER											7. UNIT or CA AGREEMENT NAME							
b. TYPE OF WORK; NEW MORIZ. DEEP- RE- WELL LATS. EN ENTRY RESVR. OTHER												1	ELL NAM			921-36	P1BS	
	NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE, L.P.													NUMBE				
KERR MCGEE OIL & GAS ONSHORE, L.P. 4304752247 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10 FIELD AND POOL, OR W													CAT					
P.O.BOX 17			TY DE	NVEF	₹	STATE	CO	ZIP 80 2	217	(72	20) 929-6	000		VATU	RAL E	UTT	ES	
4. LOCATION OF W AT SURFACE:	Alaker Life awar territoria.	4 4 4 4 5 5 5 5 5 5 5 5	1021	FEL	S36,T9	9S,R2	1E										ISHIP, RANG	
AT TOP PRODUC	CING INTERVA	L REPOR	TED BEL	.ow: S	SESE 1	249 F	FSL 51	0 FEL	. S36,7	「9S,R21	Æ							
AT TOTAL DEPT	H SESE	1210	FSL 4	186 FE	EL S36	,T9S,	R21E							OUNTY INTAI	+		13. STATE	UTAH
7/3/2012		DATE T.I 9/1/20		HED:	16. DATE 1/17	COMPL 7/2013	rate construit est a	/	ABANDONE	ED 🗌	READY TO I	PRODUC			VATIONS 136 RM		3, RT, GL):	
18. TOTAL DEPTH:	MD 9,51 TVD 9,37		1	9. PLUG	BACK T.D		9,455 9,316		20. IF N	/ULTIPLE C	OMPLETIONS	S, HOW N	ANY?*	21. DEP PLI	TH BRIDG UG SET:	E MI	272900000000	
22. TYPE ELECTRIC	C AND OTHER	MECHANI	CAL LOC	S RUN (Submit cop		Section de			23.								200 de la lace de la Compa
CBL/GR/CC	L/TEMP									WAS DST	LL CORED? RUN? DNAL SURVE	(?	ои 00 00	<u> </u>	YES T	(Sul	omit analysis) omit report) omit copy)	
24. CASING AND LI	INER RECORD	(Report a	II strings	set in w	ell)					1								
HOLE SIZE	SIZE/GRAI	DE \	WEIGHT	(#/ft.)	TOP (MD)	воттс	M (MD)		EMENTER EPTH	CEMENT T NO. OF SA		SLUF VOLUME		CEMEN	IT TOP *	* AMOUNT	PULLED
20"	14"	STL	36.7	7#	C)	4	0				28						
11"	8 5/8" I	J-55	28	#	0		2,6	663				959				0		
7 7/8"	4 1/2"	1-80	11.6	6#	0	1	9,	500		•		1,610			22	287		
															L			
25. TUBING RECOR	DEPTH SI	ET (MD)	BACK	ER SET (MD)	SIZE		DEDT	SET (MD)	LDAOKE	R SET (MD)		0/75	1.5	EDTU OF	T (115)	Lavovene	
2 3/8"	8,8		FACRI	LIX OLT (WID)	SIZE		DEFIF	ISET (NID)	PACKE	R SET (MD)		SIZE		EPTH SE	I (IVID)	PACKER S	SEI (MD)
26. PRODUCING IN										27. PERFO	RATION REC	ORD					<u> </u>	
FORMATION	NAME	TOP (MD)	вотто	OM (MD)	TOP	(TVD)	вотто	M (TVD)	INTERVA	AL (Top/Bot - I	MD)	SIZE	NO. HOL	ES	PERFO	RATION STA	TUS
(A) WASATC	Н	6,0	84	7,	081					6,084	7,	081	0.36	72	Оре	n 🔽	Squeezed	
(B) MESAVE	RDE	7,3	35	9,	359					7,335	9,	359	0.36	168	Оре	n 🗸	Squeezed	
(C)			wa										_		Оре	en 🔲	Squeezed	
(D)															Оре	en 🔲	Squeezed	
28. ACID, FRACTUI		NT, CEME	NT SQUI	EEZE, ET	С.			,										
	INTERVAL		Post 15								TYPE OF MAT		=					
6084-9359				MP 11. STAGE		BLSS	SLICK	H2O 8	<u>k</u> 252,1	180 LBS	30/50 C	OTTA	VA SA	AND				
29. ENCLOSED AT	TACHMENTS:															30. WE	LL STATUS:	
ELECT	RICAL/MECHA			CEMENT	r verific <i>a</i>	ATION		GEOLOG	IC REPOR	т 🔲	DST REPOR	т 🗸	DIREC	TIONAL S	SURVEY		PROI)
														FEB	20 2	<u>2</u> 013		

(CONTINUED ON BACK)

INTERVAL A (As shown in item #26)

DATE FIRST PR 1/17/2013		TEST DATE: 1/25/201	3		HOURS TESTED: T		OIL – BBL:	GAS - MCF: 2,071	WATER - BBL:	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,570	CSG. PRESS. 2,348	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF: 2,071	WATER - BBL:	INTERVAL STATUS
				IN.	TERVAL B (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTE	D:	TEST PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER – BBL:	INTERVAL STATUS
				IN.	TERVAL C (As sho	wn in item #26)	·		-	<u> </u>
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTE	D:	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS
				IN.	TERVAL D (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTE	D:	TEST PRODUCTION RATES: →	OIL – BBL;	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS:
32. DISPOSITIO	N OF GAS (Sold,	Used for Fuel, V	ented, Etc.)	<u> </u>	l	13.126.	<u> </u>			

33. SUMMARY OF POROUS ZONES (Include Aquifers):

34. FORMATION (Log) MARKERS:

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE	1,300 1,589 2,087 4,690 7,319

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 ¼" bit. The remainder of surface hole was drilled with an 11" bit. DQX csg was run from surface to 5035'; LTC csg was run from 5035' to 9500'. Attached is the chronological well history, perforation report & final survey.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) LINDSEY FRAZIER

TITLE REGULATORY ANALYST

SIGNATURE Sundy trus

DATE 2.14-2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Activities							REGION ary Report
Well: MORGAN	STATE 921-36P1E	SS YELLOW	3.4			<u> </u>	Spud Date: 7/21/2012
Project: UTAH-U			Site: MO	RGAN ST	ATE 921	-36P PAE	•
Event: DRILLING			Start Dat	e: 7/5/201	12		End Date: 9/2/2012
	KB @5,036.00usft	(above Mean S				S/21/E/36	66/0/0/26/PM/S/440/E/0/1021/0/0
Level)	@=,======	(42270 111041) 0	-				3.3.23.1 11.6.1 13.1 13.1 13.1 13.1 13.1 13.1
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
7/20/2012	21:30 - 23:30	2.00	MIRU	01	A	Р	RIG DOWN SKID RIG 2 HOLCROFT TRUCKS & DRIVERS RIG CREWS
	23:30 - 0:00	0.50	MIRU	01	В	Р	WELD ON RISER
7/21/2012	0:00 - 0:30	0.50	MIRU	01	В	Р	HOOK UP BLOOIE LINE
	0:30 + 1:00	0.50	PRPSPD	06	Α	Р	PICK UP 12 1/4" BIT, MUD MOTOR & BOTTOM HOLE ASSEMBLY
	1:00 - 3:00	2.00	PRPSPD	01	В	Р	CLEAN PITS TRANSFER WATER TO PITS
	3:00 - 4:30	1.50	DRLSUR	02	D	P	SPUD DRILL 12.25" SURFACE HOLE F/ 49'-210' RATE OF PENETRATION= 107' PER HOUR WEIGHT ON BIT= 14/22K REVOLUTIONS PER MINUTE= 55/105 PUMP PRESSURE ON BOTTOM=720 PUMP PRESSURE OFF BOTTOM=500 PUMP RATE=595 GALLONS PER MINUTE FOOT POUNDS OF TORQUE= 2600/1900 UP/ DOWN/ROTATING = 32/28/30 K NO LOSSES HOLE IN GOOD SHAPE
	4:30 - 6:00	1.50	DRLSUR	06	Α	P	PULL OUT OF HOLE PICK UP 11" BIT & DIRECTIONAL TOOLS SCRIBE TRIP IN HOLE TO 210'
	6:00 - 7:30	1.50	DRLSUR	02	D	P	DRILL 11" SURFACE F/210 T/317' RATE OF PENETRATION: 71' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 800 PUMP PRESSURE OFF BOTTOM: 662 PUMP RATE: 540 GALLON PER MINUTE
							FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 50/40/45 BIT POSITION: ON LINE
	7:30 - 8:00	0.50	DRLSUR	80	В	Z	***FAILURE: MUD PUMP-(CHANGE SEAT)
	8:00 - 16:00	8.00	DRLSUR	02	D	P	DRILL 11" SURFACE F/317 T/1146' RATE OF PENETRATION: 104' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 1048 PUMP PRESSURE OFF BOTTOM: 870 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 70/60/65 BIT POSITION: 1.5' RIGHT & 1.5' HIGH OF LINE

Well: MORGAN	STATE 9	21-36P1BS	YELLOW				Spud	Date: 7/21/2012
Project: UTAH-	UINTAH			Site: MOF	RGAN ST	ATE 921	-36P PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLIN	IG			Start Date	: 7/5/201	2		End Date: 9/2/2012
Active Datum: I Level)	RKB @5,0	36.00usft (al	bove Mean Se	ea	UWI: SE	E/SE/0/9/	S/21/E/36/0/0/26/I	PM/S/440/E/0/1021/0/0
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	· 克克·克格斯 2011年,1月1日的1970年(From Operation (sift)
	16:00	- 23:30	7.50	DRLSUR	02	D	P	DRILL 11" SURFACE F/1146 T/1689' RATE OF PENETRATION: 72.4' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 1100 PUMP PRESSURE OFF BOTTOM: 870 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 78/55/65 LOST CIRCULATION @ 1505' APPLIED AIR @ 800 CFM RAISED AIR TO 1100 CFM TO BUILD VOLUME BIT POSITION: .65' RIGHT & 1.95' HIGH OF LINE
	23:30	- 0:00	0.50	DRLSUR	05	Α	x	TOOK KICK @ 1689'. CIRCULATE OUT KICK. BUT HOLE BEGAN PRODUCING WATER.
7/22/2012	0:00	- 5:00	5.00	DRLSUR	02	D	P	PRODUCING WATER. DRILL 11" SURFACE F/1689' T/2190' RÂTE OF PENETRATION: 100' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 840 PUMP PRESSURE OFF BOTTOM: 600 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 108/82/95 LOST CIRCULATION @ 1500' AIR = 800-1100 CFM ENCOUNTERED WATER FLOW @ 1689'. GAINED
								APROXAMATLY 6500 BBLS OF WATER IN 3 HOURS. BIT POSITION: 1.2' RIGHT & 8.28' HIGH OF LINE
	5:00	- 6:00	1.00	DRLSUR	05	В	x	***TROUBLE-WATER FLOW-(ATTEMT TO KILL WATER FLOW)
	6:00	- 11:00	5.00	DRLSUR	02	D	P	DRILL 11" SURFACE F/2190' T/2570' RATE OF PENETRATION: 76' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 986 PUMP PRESSURE OFF BOTTOM: 755 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 107/67/90 WATER FLOW DIED AT 2500' AIR = 800-1100 CFM
	11:00	- 12:00	1.00	DRLSUR	05	Α	Р	BIT POSITION:3.2' RIGHT & 7.15' HIGH OF LINE TRANSFER MUD TO TANKS

Well: MORGAN S	STATE 9	21-36P1BS	/ELLOW	<u> </u>	<u> </u>		A CONTRACTOR	Spud Date: 7/21	/2012
Project: UTAH-UI	NTAH			Site: MOF	RGAN ST	ATE 921-	36P PAI)	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING				Start Date	e: 7/5/201	2			End Date: 9/2/2012
Active Datum: RK Level)	(B @5,0	036.00usft (ab	ove Mean Se	ea	UWI: SE	/SE/0/9/S	5/21/E/36	6/0/0/26/PM/S/440/I	E/0/1021/0/0
Date	St	Time tart-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	13:00 13:30 14:30	- 13:30 - 13:30 - 14:30 - 18:30 - 21:30	0.50 1.00 3.50 0.50 3.00	DRLSUR DRLSUR DRLSUR DRLSUR CSGSUR CSGSUR	07 05 06	A C D	P P P P		DRILL 11" SURFACE F/2570' T/2686' RATE OF PENETRATION: 116' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 986 PUMP PRESSURE OFF BOTTOM: 755 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 107/67/90 WATER FLOW DIED AT 2500' AIR = 800-1100 CFM BIT POSITION: 3.3.5' RIGHT & 6.95' HIGH OF LINE RIG SERVICE CIRCULATE FOR CASING LAY DOWN DRILL STRING, BOTTOM HOLE ASSEMBLY, AND DIRECTIONAL TOOLS RIG UP TO RUN CASING RUN 60 JOINTS 8 5/8", 28#, J55, CASING
	21:30	- 22:00	0.50	CSGSUR	05	D	P		SHOE @ 2646' BAFFLE @ 2600' PUMP ON CASING
7/23/2012	0:00	- 0:00	2.00	CSGSUR	12	E	P		HELD SAFETY MEETING WITH PRO PETRO CMT CREW MAKE UP CMT HEAD PRESSURE TEST LINES TO 2000 PSI. PUMP 50 BBLS WATER AHEAD FOLLOWED BY 20 BBL GEL WATER FLUSH PUMP 350 SX (173 BBLS) LEAD CLASS G CMT @ 12 WT & 2.78 YIELD PUMP 200 SX (41BBLS) TAIL CLASS G CMT @ 15.8 WT & 1.15 YIELD DROP PLUG & DISPLACE W/ 162 BBL'S WATER BUMP PLUG W/ 750 PSI FINAL LIFT =450 PSI CHECK FLOATS FLOAT HELD NO CEMENT TO SURFACE CUT & HANG RISER
	1:00	- 1:30	0.50	CSGSUR	12	E	P		MIX & PUMP 150 SACKS (30.9 BARRELS) DOWN BACKSIDE. NO CEMENT TO SURFACE MIX & PUMP 100 SACKS (20.4 BARRELS) DOWN BACKSIDE OF MORGAN STATE 921-36P1CS. NO CEMENT TO SURFACE
	1:30 3:00	- 3:00 - 3:30	1.50 0.50	CSGSUR CSGSUR	13 12	A E	P P		WAIT ON CEMENT MIX & PUMP 125 SACKS (20.4 BARRELS) DOWN BACKSIDE. NO CEMENT TO SURFACE MIX & PUMP 50 SACKS (10.2 BARRELS) DOWN BACKSIDE OF MORGAN STATE 921-36P1CS.
	3:30	- 5:00	1.50	CSGSUR	13	Α	Р		CEMENT TO SURFACE WAIT ON CEMENT

Well: MORGAN	STATE 9	21-36P1BS	YELLOW					Spud Date: 7/21/2012
Project: UTAH-l	JINTAH			Site: MOI	RGAN ST	ATE 921	-36P PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLIN	G			Start Date	e: 7/5/201	12	T	End Date: 9/2/2012
Active Datum: R .evel)	oove Mean S	ea	UWI: SI	E/SE/0/9/	S/21/E/36/0	0/0/26/PM/S/440/E/0/1021/0/0		
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
8/26/2012	5;00 12:00	- 6:00 - 13:30	1.00	CSGSUR	12 01	E	P	MIX & PUMP 125 SACKS (25.6 BARRELS) DOWN BACKSIDE. CEMENT TO SURFACE. FALLING BACK SLOWLY. RELEASE RIG @ 06:00 TOPPED OUT CEMENT 7/25/2012
		- 14:30	1.00	PRPSPD	14	A	P	PREPARE & SKID RIG / RU RT NIPPLE UP BOP'S & EQUIPMENT
		- 19:30	5.00	PRPSPD	15	A	P	TEST BOP'S & EQUIPMENT ASD PER PROGRAM 250/5000 PSI / 250 2500 ON ANNULAR
	19:30	- 20:30	1.00	PRPSPD	14	В	Р	INSTALL WEAR BUSHING & SMITH BEARING ASSY
	20:30	- 21:00	0.50	PRPSPD	15	Α	Р	TEST MI-SWACO PRESSURE CONTROL EQUIPMENT
	21:00	- 23:00	2.00	PRPSPD	06	Α	Р	PICK UP & MAKE UP DIRECTIONAL BHA # 1 WITH WEATHERFORD ,SCRIBE ,ORIENTATE & SURFACE TEST SAME - TIH TO 2,565'
	23:00	- 0:00	1.00	PRPSPD	07	B	Ē	PRE SPUD INSPECTION , LEVEL DERICK INSTALL ROTATING HEAD RUBBER
8/27/2012	0:00	- 2:00	2.00	PRPSPD	09	Α	Р	SLIP & CUT 96' DRILL LINE
	2:00	- 3:00	1.00	DRLPRC	02	F	Р	DRILL CEMENT & SHOE TRACK FROM 2,565' TO 2,662' CLEAN OUT RAT HOLE TO 2,703'
	3:00	- 14:30	11.50	DRLPRC	02	D	P	DRILL /SLIDE / SURVEY/ F/ 2,703' TO 4,600' = 1,897' @ 165 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2150/1750 TORQUE ON/OFF BTM 11,000/ 7,000 PICK UP WT 132,000 SLACK OFF WT 108,000 ROT WT 119,000 SLIDE 167' IN 145 MIN 8.79 % OF FOOTAGE DRILLED, 18.75 %OF HRS DRILLED MUD WT 8.4 VIS 26 NOV-D WATER SWACO OFF LINE
	14:30	- 15:00	0.50	DRLPRV	07	Α	P	NO LOSE SERVICE RIG @ 4,600'

e en						KIES RE Summa	GION y Report				
MANI: MARCAN	STATE 921-36P1BS	VELLOW	<u> </u>		14.2.						
		TELLOVV	0" 110				Spud Date: 7/21/2012				
Project: UTAH-I	UINTAH		Site: MOI	RGAN ST	ATE 921	-36P PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310				
Event: DRILLIN	G		Start Date	e: 7/5/201	12		End Date: 9/2/2012				
Active Datum: RKB @5,036.00usft (above Mean Sea Level)					UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)				
	15:00 - 0:00	9.00	DRLPRV	02	D	P	DRILL /SLIDE / SURVEY/ F/ 4,600' TO 6,135' = 1535' @ 170.55 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2225/1950 TORQUE ON/OFF BTM 11,000/ 7,000 PICK UP WT 168,000 SLACK OFF WT 115,000 ROT WT 143,000 SLIDE 34' IN 60 MIN 2.25 % OF FOOTAGE DRILLED, 7.10 %OF HRS DRILLED MUD WT 8.5 VIS 27 NOV-D WATER SWACO OFF LINE 525 WATER LOSE LOSE TOTAL RETURNS @ 5,640' - 75 BBL PUMP LCM PILLS REGAIN CIRC 2' FLARE @ 6,464' PUMP 10- 15 BBL 6% LCM SWEEPS				
8/28/2012	0:00 - 6:00	6.00	DRLPRV	02	D	P	DRILL /SLIDE / SURVEY/ F/ 6,135' TO 7,058' = 923' @ 153.8 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2325/2025 TORQUE ON/OFF BTM 13,000/ 11,000 PICK UP WT 198,000 SLACK OFF WT 123,000 ROT WT 155,000 SLIDE 18' IN 30 MIN 2.38 % OF FOOTAGE DRILLED, 10%OF HRS DRILLED MUD WT 8.5 VIS 27 NOV-D WATER SWACO OFF LINE 100 WATER LOSE PUMP 10 BBL 6% LCM SWEEPS				

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Well: MORGAN S	STATE 9	21-36P1BS	YELLOW					Spud Date: 7/21	/2012			
Project: UTAH-UI	NTAH			Site: MO	RGAN ST	ATE 921	-36P PAE)	Rig Name No: H&P 298/298, CAPSTAR 310/310			
Event: DRILLING				Start Dat	e: 7/5/201	2			End Date: 9/2/2012			
Active Datum: RK Level)	(B @5,0	36.00usft (al	bove Mean Se	ea	UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0							
Date	and the second second	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation			
	10:00	- 10:00 - 10:30 - 13:00	0.50 2.50	DRLPRV DRLPRV DRLPRV	02 07 08	D A B	P P Z		DRILL /SLIDE / SURVEY/ F/ 7,058' TO 7,344' = 286' @ 143 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2325/2025 TORQUE ON/OFF BTM 13,000/ 11,000 PICK UP WT 202,000 SLACK OFF WT 123,000 ROT WT 162,000 SLIDE 20' IN 50 MIN 3.75 % OF FOOTAGE DRILLED, 16.67%OF HRS DRILLED MUD WT 8.5 VIS 27 NOV-D WATER 75 BBL WATER LOST SWACO OFF LINE PUMP 10 BBL 6% LCM SWEEPS SERVICE RIĞ @ 7,344' TROUBLE SHOOT TOP DRIVE / MOTOR ON TDS WENT OUT - BAD AC MOTOR			
		- 19:00 - 0:00	6.00 5.00	DRLPRV	08	В	z z		*** TDS FAILURE*** PUMP & SPOT 200 BBL 9.5 PPG 60 VIS TOOH TO SHOE - BIT @ 2,680' - MONITOR & SECURE WELL *** TDS FAILURE *** CHANGE OUT TDS AC MOTOR			
8/29/2012	0:00	- 3:00	3.00	DRLPRV	08	В	Z		*** TDS FAILURE*** CHANGE OUT TDS AC MOTOR / DAMAGED SEALS WHILE INSTALLING AC MOTOR / *** TDS AC MOTOR FAILURE ***			
	_	- 7:30	4.50	DRLPRV	80	В	Z		WAIT ON SEALS FROM GRAND JUNCTION			
		- 13:00 - 17:00	5.50 4.00	DRLPRV	08	В	Z Z		REPLACE TDS TRACTION MOTOR -GEARBOX SEAL & ATTEMPT TO INSTALL TDS TRACTION MOTOR/ DAMAGED SEALS			
	17:00	- 19:30 - 0:00	2.50 4.50	DRLPRV	08	В	Z		CHANGE OUT COMPLETE TOP DRIVE DRESS DOWN TOP DRIVE,PIN TDS & SPLIT BLOCKS,USE CRANE AND REMOVE TDS FROM DERRICK WAIT ON NEW TDS TO ARRIVE ON LOCATION / (5 BBL PIT GAIN,CIRC OUT H2O FROM CSG SHOE,SPOT 50 BBLS 10#) 5-8' FLARE INSTALL TDS ***CHANGE OUT TDS***			
8/30/2012		- 12:30	12.50	DRLPRV	08	В	Z		INSTALL TDS & COMPONETS/TEST & CALIBRATE ***			
						_	_		C/O TDS ***			
		- 13:00	0.50	DRLPRV	07	Α	Р		RIG SERVICE			
		- 14:30 - 15:30	1.50	DRLPRV DRLPRV	06	С	z z		TRIP BACK IN HOLE AFTER CHANGING OUT TOP DRIVE / BREAK CIRC @ 5,000' SWIVEL PACKING LEAKING CHANGE SWIVEL PACKING			
	15:30	- 18:30	3.00	DRLPRV	06	F	Z		TRIP IN HOLE,TIGHT @ 7,240,WORK TIGHT HOLE, GAIN CIRC, W&R 100' TO BTM 3' FILL *** TRIP BACK TO BTM AFTER RIG REPAIR***			

2/4/2013

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a Saire				U Same	S ROC	KIES REG	BION	
				Opera	tion S	ummary	/ Report	
Well: MORGAN	STATE 921-36P1BS \	ELLOW					Spud Date: 7/2	1/2012
Project: UTAH-U	Project: UTAH-UINTAH Site: MOF					36P PAD	· · · · · · · · · · · · · · · · · · ·	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Event: DRILLING Start Date							End Date: 9/2/2012
Active Datum: RI Level)	Active Datum: RKB @5,036.00usft (above Mean Sea					5/21/E/36/0/	0/26/PM/S/440	/E/0/1021/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/31/2012	18:30 - 0:00 0:00 - 6:00	5.50	DRLPRV DRLPRV	02	В	P		DRILL /SLIDE / SURVEY/ F/ 7,344' TO 7,703' = 359' @ 65.8 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 105 PUMPS 105 SPM= 472 GPM PUMP PRESSURE ON/OFF BTM 1,985/1,665 TORQUE ON/OFF BTM 15,000/ 15,000 PICK UP WT 198,000 SLACK OFF WT 143,000 ROT WT 169,000 SLIDE 35' IN 60 MIN 9.70 % OF FOOTAGE DRILLED, 20%OF HRS DRILLED MUD WT 8.8 VIS 27 NOV-D RUN CONVENTIONAL 550 BBL WATER LOST / 100 BBLS HR SEEPAGE SWACO OFF LINE PUMP 15- BBL 12% LCM SWEEPS W/ANCO FIBER,CALCIUM CARBONATE,MAXI SEAL ,SAWDUST DRILL SURVEY/ F/ 7,703' TO 8,290 = 587' @ 97.8 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 110
								PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,155/1,825 TORQUE ON/OFF BTM 17,000/ 16,000 PICK UP WT 223,000 SLACK OFF MT 174,000
								SLACK OFF WT 174,000 ROT WT 169,000 SLIDE 0 MUD WT 8.8 VIS 30 NOV-D RUN CONVENTIONAL 250 BBL FLUID LOST / 40 BBLS HR SEEPAGE SWACO OFF LINE PUMP 15- BBL 12% LCM SWEEPS,ANCO FIBER,CAL CARB,MAXI SEAL,SAWDUST

		Service Company		U	S ROC	KIES RI	EGION	
				Opera	ation S	Summa	ary Report	
Well: MORGAN	STATE 921-36P1BS	YELLOW					Spud Date: 7/21/2012	
Project: UTAH-U	INTAH		Site: MOF	RGAN ST	TATE 921	-36P PAE	Rig Name No: H&P 298/298, CAPSTAR 31	0/310
Event: DRILLING			Start Date		12	<u> </u>	End Date: 9/2/2012	
Active Datum: Rh		oove Mean S				S/21/E/36	5/0/0/26/PM/S/440/E/0/1021/0/0	
Level)	- C-,							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)	
	6:00 - 14:30 14:30 - 0:00	9.50	DRLPRV	02	В	P	DRILL SURVEY/ F/ 8,290' TO 8,663 =373' @ FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 99 PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,075/1,829 TORQUE ON/OFF BTM 18,000/ 18,000 PICK UP WT 236,000 SLACK OFF WT 144,000 ROT WT 180,000 SLIDE 102' IN 305 MIN 27.3 % OF FOOTAGE DRILLED, 60%OF HRS DRILLED MUD WT 8.9 VIS 34 NOV-D RUN CONVENTIONAL 65 BBL FLUID LOST / 8-10 BBLS HR SEEPA SWACO ON LINE 8,655, ANN PRESS 170 5-FLARE PUMP 15- BBL 10% LCM SWEEPS,ANCO FI CARB,MAXI SEAL,SAWDUST DRILL, SURVEY/ F/ 8,663' TO 9,345 =682' @ FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 99 PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,140/1,908 TORQUE ON/OFF BTM 20,000/ 19,000 PICK UP WT 243,000 SLACK OFF WT 168,000 ROT WT 189,000 MUD WT 8.9 VIS 34 12%LCM NOV-D RUN CONVENTIONAL 130 BBL FLUID LOST / 10-12 BBLS HR SEEI SWACO ON LINE 8,655, ANN PRESS 250 5-FLARE PUMP 15- BBL 12% LCM SWEEPS,ANCO FI	GE 10' BER,CAL 271.7
	14:30 - 14:30	0.00	DRLPRV	07	Α	Р	CARB,MAXI SEAL,SAWDUST DAILY RIG SERVICE	ou york

					9 전투 15등 전략 - 기업 1 기업 1	S ROC		EGION ary Report	
Well: MORGAN	STATE 9	21-36P1BS	YELLOW				<u> </u>	Spud Date: 7/21/	/2012
Project: UTAH-U	INTAH			Site: MO	RGAN ST	TATE 921	-36P PAE	<u>_</u>	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING				Start Dat	e: 7/5/20°	12			End Date: 9/2/2012
Active Datum: RI	<b @5,0<="" th=""><th>36.00usft (a</th><th>bove Mean Se</th><th></th><th></th><th></th><th>S/21/E/36</th><th>5/0/0/26/PM/S/440/I</th><th></th>	36.00usft (a	bove Mean Se				S/21/E/36	5/0/0/26/P M/ S/440/I	
Level)									
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/1/2012	0:00	- 1:30 - 3:30	2.00	DRLPRV	02	B	P	(usit)	DRILL SURVEY/ F/ 9,345 TO 9,452 =682' @ 71.7 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 99 PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,140/1,905 TORQUE ON/OFF BTM 20,000/ 19,000 PICK UP WT 243,000 SLACK OFF WT 168,000 ROT WT 189,000 MUD WT 8,9 VIS 34 12%LCM NOV-D RUN CONVENTIONAL 10 BBL FLUID LOST / SWACO ON LINE 8,655, ANN PRESS 250 5-10' FLARE SURVEY @9,170 INC .38 AZ 170.08 18;SOUTH 5' EAST OF CENTER @9,350 DISPLACE HOLE W/ 10,9# 15%/SWACO OFF LINE / WHILE DRILLING / LOST 75 BBLS SEEPAGE @ 9,452 LOST RETURNS BUILD VOL /PUMP 180 BBLS 15% LCM SWEEPS @ 10.3# / NO RETURNS *** LOST CIRCULATION***
	3:30	- 6:00	2.50	DRLPRV	06	К	X		TOH / BACK REAM OUT 7 STDS PUMPING @ 60 SPM /90 BBLS / NO RETURNS / STRAIGHT PULL TO 7,800' PUMP 50 BBLS 10.3 20% DOWN BACK SIDE /HOLE FULL /PUMP DOWN DP, PARTICAL RETURNS AFTER PUMPING 50 BBLS / BUILD VOL CIRC W/ 50% RETURNS@ 60 SPM 10.3 LCM 20%/ 35 BBL LOSS
	6:00	- 8:00	2.00	DRLPRV	05	В	Х		ČÍŘĆ W/ FULL RETURNS BUILD VOL RAISE MUD WT TO 10.9# 20% LCM
	8:00	- 9:30	1.50	DRLPRV	06	K	X		STAGE BACK IN HOLE CIRC @ 8,600, WASH LAST STAND TO BTM 9,452 / NO FILL
	9:30	- 10:30 - 12:00	1.00	DRLPRV DRLPRV	02 05	В	P P		DRILL TO TD 9,510 10-15' FLARE /FINAL SURVEY @9,450 POSITION IN TARGET 21' SOUTH 7' EAST CIRC AND COND F/ CASING MUD WT TO 11.2# 5'
				5.12.111	•	Ů	•		FLARE
	12:00	- 19:00	7.00	DRLPRV	06	D	Р		TRIP OUT FOF CASING SPOT 80 BBLS 12# ON BTM,FLOW CHECK @ CASING SHOE,LAY DOWN DIRECTIONALTOOLS
	19:00	- 20:00	1.00	CSGPRO	14	В	Р		PULL BEARING ASSEMBLY, PULL WEAR BUSHING, INSTALL CASING NIPPLE
		- 20:30	0.50	CSGPRO	12	Α	P		CHANGE OUT DRILLING BAILS TO CASING BAILS
		- 21:30	1.00	CSGPRO	12	Α	P		CTJSA RIG UP FRANKS CASING EQUIP
9/2/2012	0:00	- 6:00 - 6:00	2.50 6.00	CSGPRO	12 12	c c	P P		MAKE UP FLOAT EQUIP RIH, & TEST,RUNNING 41/2 CASING @ 2,650' RUN 105 JTS I-80 11.6# LTC 4.5 CASING +1 CROSSOVER LTC/ DQX 117 JTS I-80 11.6# DQX 4.5 CASING+ RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / LANDING
								_	CASING MANDREL IN BOWL W/98,000, @ 9,500 FOR CIRC & CEMENTING / SHOE @9,500 / FC @ 9,456 / MV MKR @ 7,256 X/0 @ 5,035 ,

Operation Summary Report

Well: MORGAN STATE 921-36P1BS YELLOW Spud Date: 7/21/2012 Project: UTAH-UINTAH Site: MORGAN STATE 921-36P PAD Rig Name No: H&P 298/298, CAPSTAR 310/310 Event: DRILLING Start Date: 7/5/2012 End Date: 9/2/2012

Active Datum: RKB @5,036.00usft (above Mean Sea

UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0

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laye Taye	Date	later in the second	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
		6:00	- 7:00	1.00	CSGPRO	12	В	Р	CTJSA AND RIG DOWN CASERS
		7:00	- 9:00	2.00	CSGPRO	05	D	Р	CIRC CASING ,CT JSA RU BJ CEMENTERS
		9:00	- 12:00	3.00	CSGPRO	12	E	P	INSTALL BJ CMT HEAD, TEST PUMP & LINES TO 4,933 PSI, ,DROP BOTTOM PLUG PUMP 25 BBLS FW PUMP 456 SKS LEAD CEMENT @ 12.0 PPG,(183.5 BBLS) (PREM LITE II + .0.25 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 6% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + 0.2 % R-3 +0.4%bwoc FL-52 100.1% FRESH WATER / (12.48 gal/sx, 2.26 yield) + 1,154 SX TAIL @ 14.3 ppg (271.3 BBLS)+ (CLS G 50/50 POZ + 10% SALT + .005 llbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE +0.5%EC-1+ 58.9% FW / (5.94 gal/sx, 1.32 yield) WASH PUMP & LINES DROP TOP PLUG & DISPLACE W/ 147.0 BBLS H2O + ADDITIVES / PLUG DOWN @11:48 HOURS / FLOATS HELD W/ 2 BBLS H2O RETURNED TO INVENTORY/ PARTICAL RETURNS @ 129 BBLS IN DISPLACEMENT8 BBLS SPACER TO SURFACE / NO CEMENT / LIFT PRESSURE @ 2,627 PSI BUMP PRESSURE @3,241 / TOP OF TAIL CEMENT CALCULATED @ 4,160° R/D BJ
		12:00	- 13:30	1.50	CSGPRO	14	В	Р	FLUSH BOP'S & EQUIPMENT / SET PACK OFF WITH CAMERON / LAY DOWN RUNNING TOOL / CHANGE OUT BAILS
		13:30	- 14:30	1.00	RDMO	14	Α	Р	/NIPPLE DOWN BOP & EQUIPMENT / PREP FOR SKID / RELEASE RIG @ 14:30 HRS 09/02/2012 TO MORGAN STATE 921-36I4CS

2/4/2013

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	MORGAN STATE 921-36P1BS YELLOW	Wellbore No.	ОН
Well Name	MORGAN STATE 921-36P1BS	Wellbore Name	MORGAN STATE 921-36P1BS
Report No.	1	Report Date	10/16/2012
Project	UTAH-UINTAH	Site	MORGAN STATE 921-36P PAD
Rig Name/No.		Event	COMPLETION
Start Date	11/28/2012	End Date	1/17/2013
Spud Date	7/21/2012	Active Datum	RKB @5,036.00usft (above Mean Sea Level)
UWI	SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0	•	

1.3 General

Contractor	Job Method	Supervisor	
Perforated Assembly	Conveyed Method		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fluid Density	Gross Interval	6,084.0 (usft)-9,359.0 (usft	Start Date/Time	12/14/2012 12:00AM
Surface Press		Estimate Res Press	No. of intervals	69	End Date/Time	12/14/2012 12:00AM
TVD Fluid Top		Fluid Head	Total Shots	240	Net Perforation Interval	80.00 (usft)
Hydrostatic Press		Press Difference	Avg Shot Density	3.00 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL				Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ CC	cr@ cc	L-T MD Top	MD Base	Shot	Misfires/	Diamete	Carr Type /Stage No	Carr	Phasing	Charge Desc /Charge	Charge	Reason	Misrun
	Reservoir (u	ısft) (s (us	(usft)	(usft)	Density (shot/ft)	Add. Shot	r (in)		Size	(9)	Manufacturer	Weight		
12/14/201	WASATCH/		6,084.0	6,086.0	3.00	Court of the second		EXP/	3.375	120.00	<u>6 1 a. 1 (1885 a) - 1 1 (1743</u>	(gram) 23.00	PRODUCTIO	Land State
2													N	
12:00AM														

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carri Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/14/201 2 12:00AM	WASATCH/	Consequential Consequence of the	A distinct in a consequence	6,099.0	6,101.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	O TOTAL CONTINUES AND A STATE OF THE STATE O
	WASATCH/		ALIO CHIRESTIA ANNO ANNO ANNO ANNO ANNO ANNO ANNO AN	6,162.0	6,164.0	3.00		0.360	EXP/	3.375	120.00	A 16.	23.00	PRODUCTIO N	The state of the s
	WASATCH/			6,230.0	6,232.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	WASATCH/			6,488.0	6,489.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	WASATCH/			6,575.0	6,576.0	3.00		0.360	EXP/	3.375	120,00		23.00	PRODUCTIO N	
	WASATCH/		The same of the sa	6,627.0	6,628.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	WASATCH/		THE STREET STREE	6,645.0	6,646.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	WASATCH/			6,678.0	6,680.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2 12:00AM	WASATCH/	And the second s		6,729.0	6,730.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	······
12/14/201 2 12:00AM	WASATCH/			6,772.0	6,773.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	WASATCH/		and the second s	6,844.0	6,845.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	WASATCH/			6,904.0	6,905.0	3.00		0.360	EXP/	3.375	120.00		3	PRODUCTIO N	
	WASATCH/			6,935.0	6,936.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	WASATCH/		***************************************	6,961.0	6,962.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add, Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
2	WASATCH/		(acity	6,980.0	6,982.0			0.360	EXP/	3.375	120.00	andiert – Albina de er beskei k		PRODUCTIO N	Hilliade
12:00AM 12/14/201 2 12:00AM	WASATCH/			7,079.0	7,081.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			7,335.0	7,336.0	3.00		0.360	EXP/	3.375	120.00	***************************************	23.00	PRODUCTIO N	
	MESAVERDE/			7,347.0	7,348.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2	MESAVERDE/			7,356.0	7,357.0	3.00	and the second s	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/			7,387.0	7,388.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM 12/14/201 2 12:00AM	MESAVERDE/		and open control of the control of t	7,401.0	7,402.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/	1.000		7,413.0	7,414.0	3.00	CEMIL OF CONTRACT AND ADMINISTRATION OF THE CONTRAC	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/	Personal Section 1		7,460.0	7,461.0	3.00	material and the property of t	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	and the second s
12/14/201 2 12:00AM	MESAVERDE/			7,477.0	7,478.0	3.00	and the state of t	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			7,700.0	7,701.0	3.00	a special section of the section of	0.360	EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/		THE PERSON AND ASSESSMENT ASSESSM	7,746.0	7,747.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
1	MESAVERDE/		White the second	7,763.0	7,764.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	The state of the s
	MESAVERDE/	Por distance of the second sec	A CONTRACTOR OF THE CONTRACTOR	7,789.0	7,790.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	To the state of th

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T	MD Top (usft)	MD Base (usft)	Shot Density	Misfires/ Add, Shot	Diamete	Carr Type /Stage No	Carr	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight	Reason	Misrun
	Keservon	(usit)	(usft)	(usit)	(usit)	(shot/ft)	Add. Shot	(in)		(in)	0	warmacturer	(gram)		F. 5 3
12/14/201 2 12:00AM	MESAVERDE/			7,817.0	7,818.0				EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			7,870.0	7,871.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			7,965.0	7,967.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,005.0	8,006.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,046.0	8,047.0	3.00		0,360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,078.0	8,079.0	3.00		0.360	EXP/	3.375	120.00		23,00	PRODUCTIO N	
	MESAVERDE/			8,086.0	8,087.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2 12:00AM	MESAVERDE/			8,138.0	8,139.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2 12:00AM	MESAVERDE/			8,198.0	8,199.0	3.00		0.360	EXP/	3.375	120.00		23,00	PRODUCTIO N	
12/14/201 2 12:00AM	MESAVERDE/			8,227.0	8,228.0	3.00		0,360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2 12:00AM	MESAVERDE/			8,236.0	8,237.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,294.0	8,295.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,319.0	8,320.0	3.00		0.360	EXP/	3,375	120.00		23.00	PRODUCTIO N	
12/14/201 2 12:00AM	MESAVERDE/			8,376.0	8,377.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add, Shot	Diamete r. (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/14/201 2 12:00AM	MESAVERDE/	77777		8,391.0	8,392.0		THE SOLVE CONTRACTOR	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,405.0	8,406.0	3.00	der er en	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/	and the second s	The state of the s	8,443.0	8,444.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
12/14/201 2	MESAVERDE/			8,484.0	8,485.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	AL-MILLA THEMP AND LATERALITY
2	MESAVERDE/	WHI H minum	and the second s	8,502.0	8,503.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	A CONTRACTOR OF THE CONTRACTOR
2	MESAVERDE/			8,583.0	8,584.0	3.00	7.7827771117	0.360	EXP/	3.375	120.00			PRODUCTIO N	
12:00AM 12/14/201 2 12:00AM	MESAVERDE/		1-	8,609.0	8,610.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	The state of the s
	MESAVERDE/		TO THE PARTY OF TH	8,674.0	8,675.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
***************************************	MESAVERDE/			8,684.0	8,685.0	3.00		0.360	EXP/	3.375	120.00		- 1	PRODUCTIO N	
	MESAVERDE/			8,706.0	8,707.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	MESAVERDE/			8,764.0	8,765.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	MESAVERDE/		THE RESERVE OF THE PERSON OF T	8,789.0	8,790.0	3.00	-	0.360	EXP/	3.375	120.00	The state of the s	1	PRODUCTIO N	
	MESAVERDE/	Annual Control of the		8,826.0	8,827.0	3.00		0.360	EXP/	3.375	120.00		i	PRODUCTIO N	
	MESAVERDE/	The state of the s		8,905.0	8,906.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc/Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
2	MESAVERDE/			8,951.0	8,952.0	3.00		0.360	EXP/	3.375	120.00		i	PRODUCTIO N	
12:00AM									~~~~						
12/14/201 2 12:00AM	MESAVERDE/		TOWNS THE PROPERTY OF THE PROP	9,006.0	9,007.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	The second of th
v	MESAVERDE/			9.025.0	9.026.0	3.00		0.360	EYDI	3.375	120.00	IAL N. E. M. Salahan Salahan	23.00	PRODUCTIO	
2	MESAVERDE			9,025.0	9,020.0	3.00		0.560	EAF/	3.373	120.00		1	N	
12:00AM	Birth A													•	
2	MESAVERDE/			9,067.0	9,068.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
12:00AM			ļ	0.000.0	0.004.0			0.000	EVD:		400.00			DDODUGTIO	<u> </u>
12/14/201	MESAVERDE/			9,080.0	9,081.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
12:00AM						-					and the same of th			IN .	
ARREST TO THE RESIDENCE	MESAVERDE/			9,091.0	9,092.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			9,112.0	9,113.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			9,253.0	9,254.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
12:00AM			- C - C - C - C - C - C - C - C - C - C									TOTAL STATE OF THE			
2	MESAVERDE/		WARA A STATE OF THE STATE OF TH	9,305.0	9,306.0	3.00		0.360	EXP/	3.375	120.00		· ·	PRODUCTIO N	
12:00AM	· · · · · · · · · · · · · · · · · · ·														
12/14/201 2 12:00AM	MESAVERDE/			9,323.0	9,325.0	3.00	WATER TO THE PARTY OF THE PARTY	0.360	EXP	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			9,336.0	9,338.0	3.00	i i	0.360	EYDI	3.375	120.00		23 00	PRODUCTIO	
2 12:00AM	WEOAVERDE/	and the state of t		9,330.0	9,330.0	3.00	and the state of t	0.360		3.373	120.00	1		N PRODUCTIO	
	MESAVERDE/	<u> </u>		9,357.0	9,359.0	3.00		0.360	EXP/	3,375	120.00	A second control of the second control of th	23.00	PRODUCTIO	
2 12:00AM					-,		and the same of th						1	N	

3 Plots

Operation Summary Report

Well: MORGAN STATE 921-36P1BS YELLOW		Spud Date: 7/21/2	012
Project: UTAH-UINTAH	Site: MORGAN STATE 921-3	36P PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Date: 11/28/2012		End Date: 1/17/2013

Active Datum: RKB @5,036.00usft (above Mean Sea UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0

Level)									
Date	A # 25 - 9 **	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/21/2012		-							
10/16/2012	12:30	- 12:45	0.25	FRAC	33	С	P		RU HOT OILER, FILLED SURFACE W/ 1/2 BBL TMAC PRESSURED TO 1500, PSI NO BLEED OFF, BLED WELL DOWN SWIFN
10/17/2012		-							
12/18/2012	13:00	- 13:30	0.50	FRAĆ	33	С	Р		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. 1ST PSI TEST T/7000 PSI. HELD FOR 15 MIN LOST 63 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL SWIFN
12/28/2012	7:00	- 10:00	3.00	FRAC	37	В	P		HSM, RIGGING UP / PERF STG #1] P/U RIH PERF GUN, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE,
1/1/2013	6:30	- 6:45	0.25	FRAC	48		Р		HSM, ICE PLUGS / HIGH PRESSURE

	Op		KIES RE Summa	GION ry Report	
Well: MORGAN STATE 921-36P1BS YELLOW	<u> 20. 28/38/80/2/20</u>	Training of Disease 199		Spud Date: 7/21/	2012
Project: UTAH-UINTAH	Site: MORGA	N STATE 92	1-36P PAD		Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION S	Start Date: 11	/28/2012			End Date: 1/17/2013
Active Datum: RKB @5,036.00usft (above Mean Sea Level)	uv	VI: SE/SE/0/9	/S/21/E/36/	/0/0/26/PM/S/440/E	5/0/1021/0/0
Date Time Duration P Start-End (hr)	Phase Co	ode Sub Code	P/U	MD From (usft)	Operation
6:45 - 18:00 11.25 F	RAC S	36 B	P		PERF & FRAC FOLLOWING WELL AS PER DESIGN W/ 30/50 MESH SAND & SLK WTR. ALL CBP'S ARE HALIBURTON 8K CBP'S.
					REFER TO STIM PJR FOR FLUID, SAND AND CHEMICL VOLUME PUM'D
					FRAC STG #1] WHP=1,165#, BRK DN PERFS=4,1552#, @=4.2 BPM, INJ RT=47.6, INJ PSI=5,609#, INITIAL ISIP=2,439#, INITIAL FG=.70, FINAL ISIP=2,817#, FINAL FG=.74, AVERAGE RATE=46.5, AVERAGE PRESSURE=6,004#, MAX RATE=50.8, MAX PRESSURE=8,262#, NET PRESSURE INCREASE=378#, 18/24 75% CALC PERFS OPEN. X OVER TO WIRE LINE
					PERF STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,143', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW [SET PLUG SHOT BOTTOM 4 ZONES GUN SHORTED OUT HAD TO POOH FIX PROBLEM, RIH SHOT TOP 4 ZONES]
					FRAC STG #2] WHP=1,479#, BRK DN PERFS=4,277#, @=6.3 BPM, INJ RT=44.2, INJ PSI=5,402#, INITIAL ISIP=2,414#, INITIAL FG=.71, FINAL ISIP=2,533#, FINAL FG=.72, AVERAGE RATE=49.8, AVERAGE PRESSURE=5,783#, MAX RATE=50.6, MAX PRESSURE=6,321#, NET PRESSURE INCREASE=119#,17/24 71% CALC PERFS OPEN. X OVER TO WIRE LINE
					PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,857', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
					FRAC STG #3] WHP=374#, BRK DN PERFS=3,552#, @=4.3 BPM, INJ RT=42.6, INJ PSI=5,485#, INITIAL ISIP=1,919#, INITIAL FG=.66, FINAL ISIP=2,486#, FINAL FG=.72, AVERAGE RATE=48.1, AVERAGE PRESSURE=5,946#, MAX RATE=51.3, MAX PRESSURE=6,152#, NET PRESSURE INCREASE=576#, 15/24 63% CALC PERFS OPEN. X OVER TO WIRE LINE
					PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,533', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW. SWIFN.

Project: UTAH-UINTA	Н		Site: MO	RGAN ST	ATE 921-	36P PAD		Rig Name No. ROCKY MOUNTAIN MELL SERVICE
								Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION		<u>-</u>		e: 11/28/2	012			End Date: 1/17/2013
Active Datum: RKB @ Level)	5,036.00usft (ab	oove Mean Se	а	UWI: SE	E/SE/0/9/9	S/21/E/36	/0/0/26/PM/S/440/	E/0/1021/0/0
Date	Time - Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/2/2013 6:3	0 - 18:00	11.50	FRAC	36	В	Р		CONT PERF AND FRAC.
								FRAC STG 4) WHP 1685 PSI, BRK 4453 PSI @ 4.2 BPM. ISIP 2448 PSI, FG .0.73, CALC PERFS OPEN @ 44.8 BPM @ 5292 PSI = 75% HOLES OPEN. 0 ISIP 2191 PSI, FG .0.7, NPI -257 PSI. 0 MP 6460 PSI, MR 52 BPM, AP 5879 PSI, AR 48.1 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8267', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 5) WHP 797 PSI, BRK 5337 PSI @ 4.7 BPM. ISIP 1774 PSI, FG .0.66, CALC PERFS OPEN @ 36.1 BPM @ 5147 PSI = 63% HOLES OPEN. 0 ISIP 2262 PSI, FG .0.72, NPI 488 PSI. 0 MP 6819 PSI, MR 49.9 BPM, AP 5646 PSI, AR 46.5 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7977', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE, AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
1/3/2013 7:0	0 - 18:00	11.00	FRAC	36	В	Р		SWI. DRAIN EQUIP. CONT PERF AND FRAC.
								FRAC STG 6) WHP 315 PSI, BRK 3344 PSI @ 4.8 BPM. ISIP 1654 PSI, FG .0.65, CALC PERFS OPEN @ 46.7 BPM @ 5914 PSI = 63% HOLES OPEN. (24/24 HOLES OPEN) 15 ISIP 2188 PSI, FG .0.72, NPI 534 PSI. 0 MP 6138 PSI, MR 49 BPM, AP 5216 PSI, AR 47.6 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7508', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 7) WHP 584 PSI, BRK 2549 PSI @ 4.7 BPM. ISIP 1267 PSI, FG .0.61, CALC PERFS OPEN @ 48.9 BPM @ 4885 PSI = 67% HOLES OPEN. (24/24 HOLES OPEN) 0 ISIP 2010 PSI, FG .0.71, NPI 743 PSI. 0 MP 5235 PSI, MR 49.7 BPM, AP 4448 PSI, AR 48.4 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7111', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
1/4/2013 7:0)Ö - 18:00	11.00	FRAC	46	Ē	Z		SWI. DRAIN EQUIP. SAND MOVER BROKE DOWN.

Vell: MORGAN S	STATE 9	21-36P1BS	YELLOW				Spu	d Date: 7/21/2012
Project: UTAH-UI	NTAH			Site: MOI	RGAN ST	ATE 921-	36P PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
vent: COMPLET	TON			Start Date	e: 11/28/2	2012		End Date: 1/17/2013
ctive Datum: Rk	(B @5,0	36.00usft (a	bove Mean S				S/21/E/36/0/0/26	6/PM/S/440/E/0/1021/0/0
evel)								
Date -	2.5	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U M	ID From Operation (usft)
1/5/2013	6:00	- 18:00	12.00	FRAC	36	В	P	CONT PERF AND FRAC.
								FRAC STG 8) WHP 205 PSI, BRK 2842 PSI @ 3.2 BPM. ISIP 1809 PSI, FG .0.7, CALC PERFS OPEN @ 44.7 BPM @ 6096 PSI = 63% HOLES OPEN. ISIP 1988 PSI, FG .0.72, NPI 179 PSI. 0 MP 6768 PSI, MR 46.9 BPM, AP 6026 PSI, AR 43 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #9] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6803', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 9) WHP 405 PSI, BRK 3026 PSI @ 2.1 BPM. ISIP 1362 PSI, FG .0.64, CALC PERFS OPEN @ 42.6 BPM @ 5503 PSI = 63% HOLES OPEN. (24/24 HOLES OPEN) ISIP 1866 PSI, FG .0.72, NPI 504 PSI. MP 6746 PSI, MR 51.1 BPM, AP 5362 PSI, AR 46.2 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #10] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6262', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 10) WHP 214 PSI, BRK 1729 PSI @ 4.7 BPM. ISIP 984 PSI, FG .0.6, CALC PERFS OPEN @ 48.2 BPM @ 4852 PSI = 63% HOLES OPEN. (24/24 HOLES OPEN) 0 ISIP 1122 PSI, FG .0.62, NPI 138 PSI. 0 MP 6072 PSI, MR 52.6 BPM, AP 4868 PSI, AR 49.2 BPM, PUMPED 30/50 OWATTA SAND.
								RIH W/ WIRELINE. SET HAL 8K CBP (KILL PLUG) @6034'. POOH W/ WIRELINE. SWI. FRAC COMPLETE.
1/16/2013	7:00	- 7:15	0.25	DRLOUT	48		Р	TOTAL SAND PUMPED =252,180# TOTAL FLUID PUMPED = 11,062 BBLS HSM-JSA
	7:15	- 15:00	7.75	DRLOUT	31	1	P	MIRU, NDWH, NUBOP, PU 3 7/8" BIT & POBS W/ XN SN RIH W/ 191 JTS 2 3/8" L-80 TAG FILL @ 6,019', POOH LD 2 JTS TBG, RU PWR SWVL, SWI, SDFN.
1/17/2013	7:00	- 7:15	0.25	DRLOUT	48		Р	HSM-JSA

	G - Passa				Ü	S ROC	KIES R	EGION					
Spage 1					Opera	tion S	Summ	ary Report					
Well: MORGAN	STATE 92	21-36P1BS `	YELLOW	- <u> </u>		2004	14.700 Turney Code	Spud Date: 7/2	1/2012				
Project: UTAH-U	IINTAH			Site: MOI	e: 11/28/2012 UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/				Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3				
Event: COMPLE	TION			Start Date					End Date: 1/17/2013				
Active Datum: RI Level)	KB @5,03	36.00usft (ab	ove Mean Se	ea					0/E/0/1021/0/0				
Date	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ime irt-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation .				
	7:15	- 16:00	8.75	DRLOUT	44	С	Р	and the same of th	PU 2 JTS TBG TAG FILL @ 6,019', BRK CIRC PRESS TEST BOP TO 3,000 PSI LOST 0 PSI IN 15 MIN.				
									C/O 15' SAND TAG PLUG #1 @ 6,034', DRL HAL 8K CBP IN 7 MIN, 100 PSI INC, FCP 50 PSI, RIH TAG FILL @ 6,242'.				
									C/O 20' SAND TAG PLUG #2 @ 6,262', DRL HAL 8K CBP IN 8 MIN, 0 PSI INC, FCP 50 PSI, RIH TAG FILL @ 6,768'.				
									C/O 35' SAND TAG PLUG #3 @ 6,803', DRL HAL 8K CBP IN 6 MIN, 100 PSI INC, FCP 50 PSI, RIH TAG FILL @ 7,051'.				
									C/O 60' SAND TAG PLUG #4 @ 7,111', DRL HAL 8K CBP IN 6 MIN, 400 PSI INC, FCP 150 PSI, RIH TAG FILL @ 7,478'.				
									C/O 30' SAND TAG PLUG #5 @ 7,508', DRL HAL 8K CBP IN 8 MIN, 350 PSI INC, FCP 200 PSI, RIH TAG FILL @ 7,887'.				
									C/O 90' SAND TAG PLUG #6 @ 7,977', DRL HAL 8K CBP IN 7 MIN, 450 PSI INC, FCP 300 PSI, RIH TAG FILL @ 8,237'.				
									C/O 30' SAND TAG PLUG #7 @ 8,267', DRL HAL 8K CBP IN 5 MIN, 300 PSI INC, FCP 450 PSI, RIH TAG FILL @ 8,508'.				
									C/O 25' SAND TAG PLUG #8 @ 8,533', DRL HAL 8K CBP IN 8 MIN, 250 PSI INC, FCP 450 PSI, RIH TAG FILL @ 8,827'.				
									C/O 30' SAND TAG PLUG #9 @ 8,857', DRL HAL 8K CBP IN 6 MIN, 200 PSI INC, FCP 500 PSI, RIH TAG FILL @ 9,113'.				
									C/O 30' SAND TAG PLUG #10 @ 9,143', DRL HAL 8K CBP IN 6 MIN, 400 PSI INC, FCP 650 PSI, RIH TAG FILL @ 9,425' (66' BLW BTM PERF) CIRC CLEAN, RD PWR SWVL, POOH LD 17 JTS TBG, LAND TBG W/ 280 JTS 2 3/8" L-80 EOT @ 8,891.68', RD FLOOR & TBG EQUIP, NDBOP, NUWH, DROP BALL POBS @ 2,200 PSI, PRESS TEST FLOWLINE BETWEEN HAL 9,000 & WELLHEAD TO 3,000 PSI, LET BIT FALL 20 MIN, TURN OVER TO FBC, RDMO, WINTERIZE EQUIP, SDFN.				
									KB-26' HANGER83' 280 JTS 2 3/8" L-80-8,862.65' POBS W/ XN SN-2.20' EOT @ 8,891.68'				

US ROCKIES REGION Operation Summary Report Well: MORGAN STATE 921-36P1BS YELLOW Spud Date: 7/21/2012 Project: UTAH-UINTAH Site: MORGAN STATE 921-36P PAD Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3 Event: COMPLETION Start Date: 11/28/2012 End Date: 1/17/2013 UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0 Active Datum: RKB @5,036.00usft (above Mean Sea Level) Date Phase Duration Code P/U Time Sub MD From Operation Start-End Code (hr) (usft) 315 JTS DEL 280 JTS USED 35 JTS RET TWTR=11,362 BBLS TWR=3,036 BBLS TWLTR=8,326 BBLS 16:00 - 16:00 0.00 DRLOUT 50 WELL TURNED TO SALES @ 1500 HR ON 1/17/2013. 2600 MCFD, 1920 BPWD, FCP 2250#, FTP 2500#, 20/64" CK. 7:00 1/25/2013 50 WELL IP'D ON 1/25/13 - 2071 MCFD, 0 BWPD, 0 BOPD, CP 2348#, FTP 1570#, LP 97#, 24 HRS, CK 20/64

FORMATION TOP DETAILS Project: UTAH - UTM (feet), NAD27, Zone 12N Site: UINTAH MORGAN STATE 921-36P PAD TVDPath 4520.00 Formation WASATCH Well: MORGAN STATE 921-36P1BS 4661.77 Wellbore: MORGAN STATE 921-36P1BS 5120.00 7156.00 5261.78 INTERCEPT Section: 7297 81 MESAVERDE SHI : 9337.00 Design: MORGAN STATE 921-36P1BS (wp01) Latitude: 39.986582 Longitude: -109.493622 GL: 5010.00 KB: 26' RKB + 5010' GL @ 5036.00ft Azimuths to True North CASING DETAILS WELL DETAILS: MORGAN STATE 921-36P1BS Magnetic Field Strength: 52209.8snT Dip Angle: 65.83° Date: 8/1/2012 TVD MD Ground Level: 5010.00 Name Size Northing 14524723.42 Easting 2062381.47 +N/-S Latittude 39.986582 2543.24 2646.01 Longitude -109.493622 Slot 8-5/8 8-5/8 0.00 0.00 Model: IGRF2010 DESIGN TARGET DETAILS +N/-S 814.16 +E/-W Northing Easting Latitude Shape Circle (Radius: 15.00) Longitude -109.491799 DRILLERS TARGET_MORGAN STATE 921-36P1BS 4328.28 510.68 14525546.09 2062878.32 39.988817 INTERCEPT MORGAN STATE 921-36P1BS 5120.00 810,78 14525542.76 513.27 2062880.97 39 988808 -109.491790 **Point** MORGAN STATE 921-36P1BS 25' CYLINDER 9337.00 791.43 14525523.66 528.11 2062896.12 39.988755 -109.491737 Circle (Radius: 25.00) SECTION DETAILS MD Inc Azi **TVD** +N/-S +E/-W Dleg **TFace VSect** 2647.00 18.55 31.33 2544.18 535.99 341.35 0.00 0.00 635.32 2857.00 18.55 31.33 2743.27 593.06 376.09 0.00 0.00 702.07 4470.05 0.00 31.33 4328.28 814.16 510.68 1.15 180.00 960.69 4580.48 0.33 142.53 4438.71 813.91 510.88 0.30 142.53 960.59 9478.85 0.33 142.53 9337.00 791.43 528.11 0.00 0.00 951.45 MORGAN STATE 921-3614BS (WDOL) 9000 1350 4000 1200 1000 9000 1050 INTERCEPT MORGAN STATE 921-35PTES 2000 8-5/8 MORGAN STATE 921-36P1BS 25' CYLIND 900 3000 5000 000 fVIn) MORGAN STATE 921-36 300 DRILLERS TARGET_MORGAN STATE 921-36 DRILLERS TARGET_MORGAN STATE 921-36F BS (2000 f 4000 South(-)/North(+) 3000 Depth WASATCH 600 Vertical 5000 MORGAN STATE 921-36P1BS (wp INTERCEPT 450 BOOD INTERCEPT MORGAN STATE 921-36P1BS 2000 300 7000 MORGAN STATE 921-36P1BS MESAVERDE 150 8000 MORGAN STATE 921-36P1BS 25' CYLINDER 000 2000 MORGAN STATE 921-36P4BS (WD 9000 13-36 OFFSET SEGO MORGAN STATE 921-36P1BS (wp01) 10000 -150 300 450 600 750

-1000

-2000

2000

3000

1000

Vertical Section at 33,71° (2000 ft/in)

West(-)/East(+) (300 ft/in)

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N UINTAH_MORGAN STATE 921-36P PAD MORGAN STATE 921-36P1BS

MORGAN STATE 921-36P1BS

Design: MORGAN STATE 921-36P1BS

Standard Survey Report

04 September, 2012

Survey Report

Company: US ROCKIES REGION PLANNING Project: UTAH - UTM (feet), NAD27, Zone 12N Site: UINTAH MORGAN STATE 921-36P PAD Well: MORGAN STATE 921-36P1BS Wellbore: MORGAN STATE 921-36P1BS

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: **Survey Calculation Method:** Database:

Well MORGAN STATE 921-36P1BS 26' RKB + 5010' GL @ 5036.00ft 26' RKB + 5010' GL @ 5036.00ft

True

Minimum Curvature

UTAH - UTM (feet), NAD27, Zone 12N Project

MORGAN STATE 921-36P1BS

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 (NADCON CONUS)

Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Site **UINTAH_MORGAN STATE 921-36P PAD**

Site Position: From:

Design:

Map Zone:

Lat/Long

Northing: Easting:

14.524.732.11 usft 2,062,399,53 usft

Latitude: Longitude:

39 986605 -109.493557

Position Uncertainty:

0.00 ft

Slot Radius:

13-3/16 "

Grid Convergence:

0.97°

Well MORGAN STATE 921-36P1BS

Well Position +N/-S +E/-W

0.00 ft 0.00 ft Northing: Easting:

14,524,723.43 usft 2,062,381.46 usft Latitude: Longitude:

39.986582 -109.493622

Position Uncertainty

0.00 ft Wellhead Elevation: ft

Ground Level:

5,010.00 ft

	IGRF2010	8/1/2012	10.93	65.83	52,210
Magnetics		ample Date	Declination [Dip Angle F (°)	ield Strength (nT)
Wellbore	MORGAN STATE 921-36P1B3	ekerene o dana da ka samar.			i filoso para par de esta el combo esta en se

Design MORGAN STATE 921-36P1BS **Audit Notes:** Version: 1.0 Phase: **ACTUAL** Tie On Depth: 17.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 17.00 0.00 0.00 34.72

Survey Program 9/4/2012 From To (ft) Survey (Wellbore) **Tool Name** Description 248.00 2,647.00 Survey #1 (MORGAN STATE 921-36P1BS MWD MWD - STANDARD 2,746.00 9,510.00 Survey #2 (MORGAN STATE 921-36P1BS MWD MWD - STANDARD

Measured Depth			Vertical		Maria de Carlos de C Porto de Alexandro de Carlos d	Vertical	Dogleg	Build	Turn
(ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
17.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00
248.00	0.39	236.75	248.00	-0.43	-0.66	-0.73	0.17	0.17	0.00
338.00	0.88	46.18	338.00	-0.12	-0.41	-0.34	1.41	0.54	188.26
429.00	3.34	30.54	428.93	2.65	1.44	2.99	2.75	2.70	-17.19
522.00	4.48	29.74	521.71	8.13	4.62	9.31	1.23	1.23	-0.86
617.00	6.07	29,48	616.30	15.73	8.93	18.01	1.67	1.67	-0.27
711.00	8.09	31.50	709.58	25.70	14.83	29.57	2.16	2.15	2.15
804.00	10.21	34.13	801.39	38.10	22.87	44.34	2.32	2.28	2.83
900.00	11.97	31.70	895.60	53.61	, 32.88	62,80	1.90	1.83	-2.53
993,00	13.98	34.31	986.22	71.10	44.28	83.66	2.25	2.16	2.81

Survey Report

Company: Project: US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

Site: UINTAH_MORGAN STATE 921-36P PAD
Well: MORGAN STATE 921-36P1BS

Wellbore: MORGAN STATE 921-36P1BS
Design: MORGAN STATE 921-36P1BS

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well MORGAN STATE 921-36P1BS

26' RKB + 5010' GL @ 5036.00ft 26' RKB + 5010' GL @ 5036.00ft

True

Minimum Curvature

edmp

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
	bererer rereter en gange			PERTY TOTAL TOTAL STATE			*./2004/07/#04 9 [\$P6]8		
1,087.00	14.48	34.11	1,077.34	90.21	57.27	106.77	0.53	0.53	-0.21
1,182.00	15.65	35.72	1,169.07	110.45	71.41	131.46	1.31	1.23	1.69
1,279.00	17.94	36.34	1,261.93	133.11	87.91	159.47	2.37	2.36	0.64
1,372.00	20.49	35.37	1,349.74	157.92	105.82	190.07	2.76	2.74	-1.04
1,466.00	20.93	28,25	1,437.68	186.13	123.29	223.21	2.72	0.47	-7.57
1,557.00	21.02	27.64	1,522.65	214.91	138.56	255.56	0.26	0.10	-0.67
1,650.00	20.49	29.49	1,609.61	243.85	154.31	288.32	0.91	-0.57	1.99
1,745.00	19.61	31.41	1,698.86	271.93	170.80	320.79	1.16	-0.93	2.02
1,837.00	21,10	33.52	1,785.11	298.91	187.99	352.76	1.81	1,62	2.29
1,932.00	21.72	34.40	1,873.55	327.67	207.37	387.44	0.74	0.65	0.93
2,026.00	20.75	31.33	1,961.17	356.25	225.85	421.46	1.57	-1.03	-3.27
2,120.00	21.02	31.59	2,049.00	384.83	243.34	454.91	0.30	0.29	0.28
2,214.00	20.66	34.75	2,136.85	412.82	261.63	488.33	1.26	-0.38	3.36
2,308.00	20.84	34.40	2,224.75	440.24	280.53	521.63	0.23	0.19	-0.37
2,403.00	20.05	32.73	2,313.77	467.89	298.88	554.81	1.03	-0.83	-1.76
2,496.00	19.37	32.28	2,401.32	494.34	315.74	586.15	0.75	-0.73	-0.48
2,591.00	18.73	31.24	2,491.12	520.70	332.06	617,11	0.76	-0.67	-1.09
2,647.00	18.55	31.33	2,544.18	535.99	341.35	634.98	0.33	-0.32	0.16
TIE ON									
2,746.00	17.38	29.66	2,638.35	562.29	356.86	665.43	1.29	-1.18	-1.69
FIRST MWD	SURVEY								
2,841.00	15.24	29.73	2,729.52	585.47	370.07	692.00	2.25	-2.25	0.07
2,935.00	14.65	28.06	2,820.34	606.69	381.79	716.12	0.78	-0.63	-1.78
3,030.00	14.50	28.83	2,912.29	627.71	393.18	739.88	0.26	-0.16	0.81
3,124.00	14.19	27.45	3,003.36	648.24	404.16	763.02	0,49	-0.33	-1.47
3,219.00	13.81	27.33	3,095.53	668.65	414.74	785.81	0.40	-0.40	-0.13
3,313.00	12.56	30.33	3,187.05	687.44	425.05	807.13	1.52	-1.33	3.19
3,408.00	11.19	31.08	3,280.02	704.25	435.03	826.63	1.45	-1.44	0.79
3,502.00	11.75	33.58	3,372.14	720.03	445.03	845.30	0.80	0.60	2.66
3,597.00	11.75	36,58	3,465.15	735.86	456.14	864.64	0.64	0.00	3.16
3,691.00	10.69	33.70	3,557.36	750.80	466.68	882.92	1.28	-1.13	-3.06
3,786.00	9.94	31.83	3,650.82	765.10	475.90	899.92	0,86	-0.79	-1.97
3,880.00	7.38	29.70	3,743.74	777.24	483.17	914.04	2.74	-2.72	-2.27
3,975.00	5.19	27.83	3,838.16	786.34	488.20	924.38	2.32	-2.31	-1.97
4,069.00	4.88	29.83	3,931.80	793.57	492.17	932.59	0.38	-0.33	2.13
4,164.00	3.25	28.83	4,026.56	799.43	495.48	939.29	1.72	-1.72	-1.05
4,258.00	1.94	31.70	4,120.46	803.12	497.60	943.53	1.40	-1.39	3.05
4,353.00	1.44	36.95	4,215.42	805.44	499.16	946.33	0.55	-0.53	5.53
4,447.00	1.13	40.95	4,309.39	807.08	500.48	948.43	0.34	-0.33	4.26
4,542.00	0.94	52.45	4,404.38	808.27	501.71	950.11	0.30	-0.20	12.11
4,636.00	0.56	66.33	4,498.37	808.92	502.75	951.23	0.45	-0.40	14.77
4,731.00	1.38	63.95	4,593.36	809.61	504.20	952.63	0.86	0.86	-2,51

Survey Report

Company: Project:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N UINTAH_MORGAN STATE 921-36P PAD

Site: Well: MORGAN STATE 921-36P1BS MORGAN STATE 921-36P1BS

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Well MORGAN STATE 921-36P1BS 26' RKB + 5010' GL @ 5036.00ft 26' RKB + 5010' GL @ 5036.00ft

True

	MORGAN STATE 9 MORGAN STATE 9			Survey Ca Database:	lculation Meth		Minimum Curva edmp	ature	
эу .			karangan ang merengan karang merengan berangan beranggan berang dianggan beranggan beranggan beranggan berang Beranggan beranggan					e Albart (Francisco de Paris) National de Paris de Paris (Francisco de Paris)	
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,919.0	00 1.13	83.33	4,781.31	810.83	508.20	955.90	0.29	-0.19	10.51
5,014.0	00 1.38	87.58	4,876.29	810.98	510.27	957.21	0.28	0.26	4.47
5,109.0	00 1.38	102.20	4,971.26	810.79	512.53	958.34	0.37	0.00	15.39
5,203.0	00 1.31	120.45	5,065.23	810.01	514.56	958.86	0.46	-0.07	19.41
5,297.0	00 1.50	122.45	5,159.21	808.80	516.53	958.99	0.21	0.20	2.13
5,392.0	00 1,63	127.33	5,254.17	807.32	518.65	958.97	0.20	0.14	5.14
5,486.0	0.75	243.08	5,348.16	806.23	519.17	958.37	2.20	-0.94	123.14
5,580.0	00 1.69	304.20	5,442.14	806.73	517.47	957.82	1.58	1.00	65.02
5,675.0	00 1.19	307.08	5,537.11	808.11	515.53	957.84	0.53	-0.53	3.03
5,769.0	0.88	299,45	5,631.09	809.05	514.12	957.82	0.36	-0.33	-8.12
5,863.0	0.63	277.70	5,725.08	809.48	512.98	957.52	0.40	-0.27	-23.14
5,958.0		253,58	5,820.08	809.38	511.91	956.83	0.30	0.06	-25.39
6,052.0		231.45	5,914.07	808.94	511.01	955.95	0.29	-0.14	-23.54
6,147.0	00 0.63	217.83	6,009.07	808.24	510.33	954.99	0.17	0.07	-14.34
6,242.0		210.95	6,104.06	807.29	509.69	953.85	0.15	0.13	-7.24
6,336.0		192.08	6,198.05	806.16	509.24	952.66	0.26	0.00	-20.07
6,431.0		179.58	6,293.04	804.72	509.12	951.41	0.33	0.26	-13.16
6,525.0		173.45	6,387.03	803.04	509.22	950.09	0.13	0.06	-6.52
6,619.0	00 1.06	167.83	6,481.01	801.33	509.50	948.84	0.11	0.00	-5.98
6,714.0		42.45	6,576.01	800.77	509.97	948.65	1.48	-0.59	-131.98
6,808.0		41.58	6,670.00	801.38	510,52	949.46	0.01	0.00	-0.93
6,903.0		83.95	6,765.00	801.74	511.21	950.15	0.38	0.00	44.60
6,998.0		113.95	6,859.99	801.57	512.10	950.52	0.34	0.14	31.58
7,092.0	0.50	252.08	6,953.99	801.23	512.18	950.29	1.12	-0.14	146.95
7,186.0	88.0 00	164.70	7,047.99	800.41	511.98	949.50	1.06	0.40	-92.96
7,281.0		146.20	7,142.97	798.85	512.75	948.65	0.53	0.39	-19.47
7,375.0		142.70	7,236.95	797.18	513.94	947.96	80.0	0.00	-3.72
7,470.0		144.33	7,331.93	795.72	515.02	947.37	0.33	-0.33	1.72
7,564.0	00 1.38	143.58	7,425.91	794.18	516.14	946.75	0.47	0.47	-0.80
7,659.0		139.95	7,520.88	792.23	517.69	946.03	0.28	0.26	-3.82
7,753.0		137.33	7,614.83	790.04	519.63	945.33	0.34	0.33	-2.79
7,848.0		134.58	7,709.78	787.69	521.90	944.69	0.12	0.06	-2.89
8,037.0		135,08	7,898.70	783.84	525.77	943.74	0.37	-0.37	0.26
8,225.0	00 1.94	148.58	8,086.62	779.61	528.95	942.07	0.39	0.34	7.18
8,414.0		147.70	8,275.49	773.56	532.72	939.24	0.23	0.23	-0.47
8,509.0		122,58	8,370.44	771.42	534.51	938.50	1.57	-1.39	-26.44
8,603.0		3.33	8,464.44	771.26	535.26	938.80	1.37	-0.72	-126.86
8,698.0		345.83	8,559.43	772.49	535.05	939.69	0.82	0.79	-18.42
8,792.0	0.69	351.70	8,653.42	773.94	534.74	940.71	0.48	-0.47	6.24
8,887.0		326.20	8,748.41	774.96	534.36	941.33	0.31	-0.04	-26.84
8,981.0		229.20	8,842.41	775.03	533.63	940.97	1.07	0.04	-103.19
9,170.0		170.08	9,031.40	773.67	532.88	939.43	0.31	-0.16	-31.28
0.450.0	0.00	142 71	0.211.20	770.00			0.04		

9,450.00

LAST MWD SURVEY

0.90

143.71

9,311.38

534.34

938.05

0.21

0.19

770,98

-9.42

Survey Report

Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site:

UINTAH_MORGAN STATE 921-36P PAD

Well: Wellbore: MORGAN STATE 921-36P1BS
MORGAN STATE 921-36P1BS

Design:

MORGAN STATE 921-36P1BS

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well MORGAN STATE 921-36P1BS 26' RKB + 5010' GL @ 5036.00ft

26' RKB + 5010' GL @ 5036.00ft

North Reference:

True

Survey Calculation Method:

Minimum Curvature

Database:

edmp

Survey

Measured Depth Inc (ft)	lination (°)		Vertical Depth (ft)		+E/-W	Vertical Section (ft)	Dogleg Rate	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,510.00 PROJECTION TO	0.90 OTD	143.71	9,371.37	770.22	534.90	937.74	0.00	0.00	0.00	

Design Annotations					
I the second of the second of the	sured	Vertical	Local Cod	ordinates	
	epth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
2	,647.00	2,544.18	535.99	341.35	TIE ON
2	,746.00	2,638.35	562.29	356.86	FIRST MWD SURVEY
9	,450.00	9,311.38	770.98	534.34	LAST MWD SURVEY
9	,510.00	9,371.37	770.22	534.90	PROJECTION TO TD

Checked By:	Approved By:	Date:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

AMENDED REPORT 🗌	FORM 8
(highlight changes)	
5. LEASE DESIGNATION AND SER	IAL NUMBER:
ML 22265	
3. IF INDIAN, ALLOTTEE OR TRIBE	NAME
7. UNIT or CA AGREEMENT NAME	

					FOIL,								5. LE	ASE DES AL 22	SIGNATIO		SERIAL NUME	BER:
WELI	L COMF	PLETI	ION	OR F	RECO	MPL	.ETIC	N RI	EPOR	T ANI	D LOG					E OR TR	RIBE NAME	
1a. TYPE OF WELL:	:	, OIL	LL 🗆	(GAS WELL Z]	DRY		ОТН	ER			7. U	NIT or CA	AGREEN	ENT NA	ME	
b. TYPE OF WORK NEW WELL	(; HORIZ. LATS.	DEI EN	EP-		RE- ENTRY]	DIFF. RESVR.		ОТНІ	ER			1	ELL NAM			921-36	P1BS
2. NAME OF OPERA KERR MC		& GA!	S ON		-									PI NUMBE		,		
3. ADDRESS OF OF			-	0,101	<u> </u>	•				PHONE	NUMBER:			13047 ELD AND			CAT	
P.O.BOX 17			TY DE	NVEF	₹	STATE	CO	ZIP 80 2	217	(72	20) 929-6	000		NATU	RAL E	BUTTI	ES	
4. LOCATION OF W AT SURFACE:	Alaker Life awar territoria.	4 4 6 4 5 6 6 6 6 6 6	1021	FEL	S36,T9	9S,R2	1E						4.5				ISHIP, RANG	
AT TOP PRODUC	CING INTERVA	L REPOR	TED BEL	.ow: S	SESE 1	249 F	FSL 51	0 FEL	. S36,7	「9S,R21	Æ							
AT TOTAL DEPT	H SESE	1210	FSL 4	186 FE	EL S36	,T9S,	R21E							OUNTY JINTA	Н		13. STATE	UTAH
7/3/2012		DATE T.0 9/1/20		HED:	16. DATE 1/17	COMPL 7/2013	rate construit est a	/	ABANDONE	ED 🔲	READY TO I	PRODUC	E 🗾		VATIONS 136 R		В, RT, GL):	
18. TOTAL DEPTH:	MD 9,51 TVD 9,37		1	9. PLUG	BACK T.D		9,455 9,316		20. IF N	/ULTIPLE C	OMPLETIONS	S, HOW M	IANY?*	21. DEP PL	TH BRIDG UG SET:	E ME	27.286929.201.7 227.286929.201.201	
22. TYPE ELECTRIC	C AND OTHER	MECHANI	CAL LOC	S RUN (Submit cop		Section de			23.								
CBL/GR/CC	L/TEMP									WAS DST	LL CORED? RUN? DNAL SURVE	(?	NO NO NO	<u> </u>	YES	(Sul	omit analysis) omit report) omit copy)	
24. CASING AND LI	INER RECORD	(Report a	II strings	set in w	ell)					1								
HOLE SIZE	SIZE/GRAI	DE \	WEIGHT	(#/ft.)	TOP (MD)	воттс	M (MD)		EMENTER EPTH	CEMENT T NO. OF SA		SLUF		CEMEN	IT TOP *	* AMOUNT	PULLED
20"	14"	STL	36.7	36.7# 0 40								28						
11"	8 5/8" I	J-55	28	#	0		2,6	663				959	-			0		
7 7/8"	4 1/2"	1-80	11.6	6#	0	1	9,	500		•		1,610			22	287		
															L			
25. TUBING RECOR	DEPTH SI	ET (MD)	BACK	ER SET (MD)	SIZE		DEDT	SET (MD)	LDAOKE	R SET (MD)		0.75	1.5	FOTU OF	T. (115)	Lavoren	
2 3/8"	8,8		FACRI	LIX OLT (WID)	SIZE		DEFIF	ISET (NID)	PACKE	R SET (MD)		SIZE		EPTH SE	I (MD)	PACKER	SEI (MD)
26. PRODUCING IN										27. PERFO	RATION REC	ORD	, ,					
FORMATION	NAME	TOP (MD)	вотто	OM (MD)	TOP	(TVD)	вотто	M (TVD)	INTERVA	AL (Top/Bot - I	MD)	SIZE	NO. HOL	.ES	PERFO	RATION STA	TUS
(A) WASATC	Н	6,0	84	7,	081					6,084	7,	081	0.36	72	Оре	en 🔽	Squeezed	
(B) MESAVE	RDE	7,3	35	9,	359					7,335	9,	359	0.36	168	Оре	en 🗸	Squeezed	
(C)			wa												Оре	n 🗌	Squeezed	
(D)								<u></u>							Оре	n 🗌	Squeezed	
28. ACID, FRACTUI		NT, CEME	NT SQUI	EEZE, ET	С.			,										
	INTERVAL		Post 15								TYPE OF MAT		=					
6084-9359				MP 11. STAGE		BLS S	SLICK	H2O 8	<u>k</u> 252,1	180 LBS	30/50 C	OTTA	NA SA	AND				
29. ENCLOSED AT	TACHMENTS:												_			30. WE	LL STATUS:	
ELECT	RICAL/MECHA			CEMENT	r verific <i>a</i>	ATION		GEOLOG	IC REPOR	т 🔲	DST REPOR	т 🔽	DIREC	TIONAL S	SURVEY		PROI	
														FEB	20	2013		

(CONTINUED ON BACK)

INTERVAL A (As shown in item #26)

	DATE FIRST PRODUCED: TEST DATE: HC 1/17/2013		HOURS TESTE	D: 24	TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF: 2,071	WATER - BBL:	PROD. METHOD: FLOWING	
CHOKE SIZE: 20/64	TBG. PRESS. 1,570	CSG. PRESS. 2,348	API GRAVITY	BTU – GAS	BTU – GAS GAS/OIL RATIO		OIL BBL:	GAS - MCF: 2,071	WATER - BBL:	INTERVAL STATUS
				IN.	TERVAL B (As sho	wn in item #26)				
DATE FIRST PRODUCED: TEST DATE:		HOURS TESTE	D:	TEST PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:		
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER – BBL:	INTERVAL STATUS:
				IN.	TERVAL C (As sho	wn in item #26)	·		-	<u> </u>
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTE	D:	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS
				IN.	TERVAL D (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTE	D:	TEST PRODUCTION RATES: →	OIL – BBL;	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY			24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS:
32. DISPOSITIO SOLD	N OF GAS (Sold,	Used for Fuel, V	ented, Etc.)	<u> </u>	l	13.126.	<u> </u>			

33. SUMMARY OF POROUS ZONES (Include Aquifers):

34. FORMATION (Log) MARKERS:

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation Top Bottom (MD) Descriptions, C		Descriptions, Contents, etc.	Name	Top (Measured Depth)	
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE	1,300 1,589 2,087 4,690 7,319

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 ¼" bit. The remainder of surface hole was drilled with an 11" bit. DQX csg was run from surface to 5035'; LTC csg was run from 5035' to 9500'. Attached is the chronological well history, perforation report & final survey.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) LINDSEY FRAZIER

TITLE REGULATORY ANALYST

SIGNATURE Sundy trus

DATE 2.14-2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Activities							REGION ary Report
Well: MORGAN	STATE 921-36P1E	SS YELLOW	3.4			<u> </u>	Spud Date: 7/21/2012
Project: UTAH-U			Site: MO	RGAN ST	ATE 921	-36P PAE	•
Event: DRILLING Start Da					12		End Date: 9/2/2012
Active Datum: RKB @5,036.00usft (above Mean Sea						S/21/E/36	66/0/0/26/PM/S/440/E/0/1021/0/0
Level)	@=,======	(42270 111041) 0	-				3.3.23.1 11.6.1 13.1 13.1 13.1 13.1 13.1 13.1
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
7/20/2012	21:30 - 23:30	2.00	MIRU	01	A	Р	RIG DOWN SKID RIG 2 HOLCROFT TRUCKS & DRIVERS RIG CREWS
	23:30 - 0:00	0.50	MIRU	01	В	Р	WELD ON RISER
7/21/2012	0:00 - 0:30	0.50	MIRU	01	В	Р	HOOK UP BLOOIE LINE
	0:30 + 1:00	0.50	PRPSPD	06	Α	Р	PICK UP 12 1/4" BIT, MUD MOTOR & BOTTOM HOLE ASSEMBLY
	1:00 - 3:00	2.00	PRPSPD	01	В	Р	CLEAN PITS TRANSFER WATER TO PITS
	3:00 - 4:30	1.50	DRLSUR	02	D	P	SPUD DRILL 12.25" SURFACE HOLE F/ 49'-210' RATE OF PENETRATION= 107' PER HOUR WEIGHT ON BIT= 14/22K REVOLUTIONS PER MINUTE= 55/105 PUMP PRESSURE ON BOTTOM=720 PUMP PRESSURE OFF BOTTOM=500 PUMP RATE=595 GALLONS PER MINUTE FOOT POUNDS OF TORQUE= 2600/1900 UP/ DOWN/ROTATING = 32/28/30 K NO LOSSES HOLE IN GOOD SHAPE
	4:30 - 6:00	1.50	DRLSUR	06	Α	P	PULL OUT OF HOLE PICK UP 11" BIT & DIRECTIONAL TOOLS SCRIBE TRIP IN HOLE TO 210'
	6:00 - 7:30	1.50	DRLSUR	02	D	P	DRILL 11" SURFACE F/210 T/317' RATE OF PENETRATION: 71' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 800 PUMP PRESSURE OFF BOTTOM: 662 PUMP RATE: 540 GALLON PER MINUTE
							FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 50/40/45 BIT POSITION: ON LINE
	7:30 - 8:00	0.50	DRLSUR	80	В	Z	***FAILURE: MUD PUMP-(CHANGE SEAT)
	8:00 - 16:00	8.00	DRLSUR	02	D	P	DRILL 11" SURFACE F/317 T/1146' RATE OF PENETRATION: 104' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 1048 PUMP PRESSURE OFF BOTTOM: 870 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 70/60/65 BIT POSITION: 1.5' RIGHT & 1.5' HIGH OF LINE

Well: MORGAN	STATE 9	921-36P1BS	YELLOW				S	ud Date: 7/21/2012			
Project: UTAH-	UINTAH			Site: MOF	RGAN ST	ATE 921	I-36P PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310			
Event: DRILLIN	IG			Start Date	e: 7/5/201	2		End Date: 9/2/2012			
Active Datum: F Level)	RKB @5,0	036,00usft (al	oove Mean Se	a	UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0						
Date	A Action to	Time tart-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)			
	16:00	- 23:30	7.50	DRLSUR	02	D	Р	DRILL 11" SURFACE F/1146 T/1689' RATE OF PENETRATION: 72.4' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 1100 PUMP PRESSURE OFF BOTTOM: 870 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 78/55/65 LOST CIRCULATION @ 1505' APPLIED AIR @ 800 CFM RAISED AIR TO 1100 CFM TO BUILD VOLUME			
	23:30	- 0:00	0.50	DRLSUR	05	Α	х	BIT POSITION: .65' RIGHT & 1.95' HIGH OF LINE TOOK KICK @ 1689'. CIRCULATE OUT KICK. BUT HOLE BEGAN			
7/22/2012	0:00	- 5:00	5,00	DRLSUR	02	D	P	PRODUCING WATER. DRILL 11" SURFACE F/1689' T/2190' RATE OF PENETRATION: 100' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 840 PUMP PRESSURE OFF BOTTOM: 600 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 108/82/95 LOST CIRCULATION @ 1500' AIR = 800-1100 CFM ENCOUNTERED WATER FLOW @ 1689'. GAINED APROXAMATLY 6500 BBLS OF WATER IN 3			
	5:00	- 6:00	1.00	DRLSUR	05	В	x	HOURS. BIT POSITION: 1.2' RIGHT & 8.28' HIGH OF LINE ***TROUBLE-WATER FLOW-(ATTEMT TO KILL			
	6:00	- 11:00	5.00	DRLSUR	Ö2	D	P	WATER FLOW) DRILL 11" SURFACE F/2190' T/2570' RATE OF PENETRATION: 76' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 986 PUMP PRESSURE OFF BOTTOM: 755 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 107/67/90 WATER FLOW DIED AT 2500' AIR = 800-1100 CFM BIT POSITION:3.2' RIGHT & 7.15' HIGH OF LINE			
	11:00	- 12:00	1.00	DRLSUR	05	Α	Р	TRANSFER MUD TO TANKS			

Well: MORGAN		∠1-36P1BS \	rellow					Spud Date: 7/2		
Project: UTAH-	-UINTAH			Site: MOI	RGAN ST	ATE 921-	-36P PAE) 	Rig Name No: H&P 298/298, CAPSTAR 310/310	
Event: DRILLIN	NG			Start Date	1				End Date: 9/2/2012	
Active Datum: Level)	RKB @5,0	36.00usft (ab	ove Mean S	ea 	UWI: SE	E/SE/0/9/	S/21/E/36	6/0/0/26/PM/S/440	VE/0/1021/0/0	
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation	
	13:00 13:30 14:30	- 13:30 - 13:30 - 14:30 - 18:30 - 21:30	0.50 1.00 3.50 0.50 3.00	DRLSUR DRLSUR DRLSUR DRLSUR CSGSUR CSGSUR	07 05 06	A C D	P P P P P		DRILL 11" SURFACE F/2570' T/2686' RATE OF PENETRATION: 116' PER HOUR WEIGHT ON BIT: 22 TO 30 K REV. PER MINUTE:: 60/105 PUMP PRESSURE ON BOTTOM: 986 PUMP PRESSURE OFF BOTTOM: 755 PUMP RATE: 540 GALLON PER MINUTE FT LBS OF TORQUE: 2800 TO 3150 UP/DOWN/ROTATING: 107/67/90 WATER FLOW DIED AT 2500' AIR = 800-1100 CFM BIT POSITION: 3.3.5' RIGHT & 6.95' HIGH OF LINE RIG SERVICE CIRCULATE FOR CASING LAY DOWN DRILL STRING, BOTTOM HOLE ASSEMBLY, AND DIRECTIONAL TOOLS RIG UP TO RUN CASING RUN 60 JOINTS 8 5/8", 28#, J55, CASING SHOE @ 2646'	
	21:30	- 22:00	0.50	CSGSUR	05	D	P		SHOE @ 2646' BAFFLE @ 2600' PUMP ON CASING	
7/23/2012	0:00	- 0:00	2.00	CSGSUR	12	Ē	P		HELD SAFETY MEETING WITH PRO PETRO CMT CREW MAKE UP CMT HEAD PRESSURE TEST LINES TO 2000 PSI. PUMP 50 BBLS WATER AHEAD FOLLOWED BY 20 BBL GEL WATER FLUSH PUMP 350 SX (173 BBLS) LEAD CLASS G CMT @ 12 WT & 2.78 YIELD PUMP 200 SX (41BBLS) TAIL CLASS G CMT @ 15.8 WT & 1.15 YIELD DROP PLUG & DISPLACE W/ 162 BBL'S WATER BUMP PLUG W/ 750 PSI FINAL LIFT =450 PSI CHECK FLOATS FLOAT HELD NO CEMENT TO SURFACE CUT & HANG RISER	
	1:00	- 1:30	0.50	CSGSUR	12	Ē	P		MIX & PUMP 150 SACKS (30.9 BARRELS) DOWN	
	1:30 3:00	- 3:00 - 3:30	1.50 0.50	CSGSUR CSGSUR	13 12	A E	P P		BACKSIDE. NO CEMENT TO SURFACE MIX & PUMP 100 SACKS (20.4 BARRELS) DOWN BACKSIDE OF MORGAN STATE 921-36P1CS. NO CEMENT TO SURFACE WAIT ON CEMENT MIX & PUMP 125 SACKS (20.4 BARRELS) DOWN BACKSIDE. NO CEMENT TO SURFACE	
	3:30	- 5:00	1.50	CSGSUR	13	Α	Р		MIX & PUMP 50 SACKS (10.2 BARRELS) DOWN BACKSIDE OF MORGAN STATE 921-36P1CS. CEMENT TO SURFACE WAIT ON CEMENT	

Well: MORGAN	STATE 9	21-36P1BS	YELLOW					Spud Date: 7/21/2012
Project: UTAH-l	JINTAH			Site: MOI	RGAN ST	ATE 921	-36P PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING Start Date						12	T	End Date: 9/2/2012
Active Datum: RKB @5,036.00usft (above Mean Sea Level)					UWI: SI	E/SE/0/9/	S/21/E/36/0	0/0/26/PM/S/440/E/0/1021/0/0
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
8/26/2012	5;00 12:00	- 6:00 - 13:30	1.00 1.50	CSGSUR	12 01	E	P	MIX & PUMP 125 SACKS (25.6 BARRELS) DOWN BACKSIDE. CEMENT TO SURFACE. FALLING BACK SLOWLY. RELEASE RIG @ 06:00 TOPPED OUT CEMENT 7/25/2012 PREPARE & SKID RIG / RU RT
		- 14:30	1.00	PRPSPD	14	A	P	NIPPLE UP BOP'S & EQUIPMENT
		- 19:30	5.00	PRPSPD	15	A	P	TEST BOP'S & EQUIPMENT ASD PER PROGRAM 250/5000 PSI / 250 2500 ON ANNULAR
	19:30	- 20:30	1.00	PRPSPD	14	В	Р	INSTALL WEAR BUSHING & SMITH BEARING ASSY
	20:30	- 21:00	0.50	PRPSPD	15	Α	Р	TEST MI-SWACO PRESSURE CONTROL EQUIPMENT
	21:00	- 23:00	2.00	PRPSPD	06	Α	Р	PICK UP & MAKE UP DIRECTIONAL BHA # 1 WITH WEATHERFORD ,SCRIBE ,ORIENTATE & SURFACE TEST SAME - TIH TO 2,565'
	23:00	- 0:00	1.00	PRPSPD	07	B	P	PRE SPUD INSPECTION , LEVEL DERICK INSTALL ROTATING HEAD RUBBER
8/27/2012	0:00	- 2:00	2.00	PRPSPD	09	Α	Р	SLIP & CUT 96' DRILL LINE
	2:00	- 3:00	1.00	DRLPRC	02	F	P	DRILL CEMENT & SHOE TRACK FROM 2,565' TO 2,662' CLEAN OUT RAT HOLE TO 2,703'
	3:00	- 14:30	11.50	DRLPRC	02	D	P	DRILL /SLIDE / SURVEY/ F/ 2,703' TO 4,600' = 1,897' @ 165 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2150/1750 TORQUE ON/OFF BTM 11,000/ 7,000 PICK UP WT 132,000 SLACK OFF WT 108,000 ROT WT 119,000 SLIDE 167' IN 145 MIN 8.79 % OF FOOTAGE DRILLED, 18.75 %OF HRS DRILLED MUD WT 8.4 VIS 26 NOV-D WATER SWACO OFF LINE
	14:30	- 15:00	0.50	DRLPRV	07	Α	P	NO LOSE SERVICE RIG @ 4,600'

en e		100 100 100 100 100 100 100 100 100 100				KIES RE Summa	GION y Report			
MAII: MADCAN	STATE 921-36P1BS	VELLOW	<u> </u>							
		TELLOVV	0" 110				Spud Date: 7/21/2012			
Project: UTAH-UINTAH Site: MOF Event: DRILLING Start Date			RGAN ST	ATE 921	-36P PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310				
			e: 7/5/201	12		End Date: 9/2/2012				
Active Datum: RKB @5,036.00usft (above Mean Sea Level)					UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0					
Date			Phase	Code	Sub Code	P/U	MD From Operation (usft)			
	15:00 - 0:00	9.00	DRLPRV	02	D	P	DRILL /SLIDE / SURVEY/ F/ 4,600' TO 6,135' = 1535' @ 170.55 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2225/1950 TORQUE ON/OFF BTM 11,000/ 7,000 PICK UP WT 168,000 SLACK OFF WT 115,000 ROT WT 143,000 SLIDE 34' IN 60 MIN 2.25 % OF FOOTAGE DRILLED, 7.10 %OF HRS DRILLED MUD WT 8.5 VIS 27 NOV-D WATER SWACO OFF LINE 525 WATER LOSE LOSE TOTAL RETURNS @ 5,640' - 75 BBL PUMP LCM PILLS REGAIN CIRC 2' FLARE @ 6,464' PUMP 10- 15 BBL 6% LCM SWEEPS			
8/28/2012	0:00 - 6:00	6.00	DRLPRV	02	D	P	DRILL /SLIDE / SURVEY/ F/ 6,135' TO 7,058' = 923' @ 153.8 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2325/2025 TORQUE ON/OFF BTM 13,000/ 11,000 PICK UP WT 198,000 SLACK OFF WT 123,000 ROT WT 155,000 SLIDE 18' IN 30 MIN 2.38 % OF FOOTAGE DRILLED, 10%OF HRS DRILLED MUD WT 8.5 VIS 27 NOV-D WATER SWACO OFF LINE 100 WATER LOSE PUMP 10 BBL 6% LCM SWEEPS			

2/4/2013

9:56:39AM

			en e	y en el el e	100 miles 1249		KIES R S ümma	EGION ary Report			
Well: MORGAN S	STATE 9	21-36P1BS	YELLOW	****				Spud Date: 7/21	/2012		
Project: UTAH-UI	NTAH			Site: MO	RGAN ST	ATE 921	-36P PAE)	Rig Name No: H&P 298/298, CAPSTAR 310/310		
Event: DRILLING				Start Dat	e: 7/5/201	2			End Date: 9/2/2012		
Active Datum: RK Level)	(B @5,0	36.00usft (al	oove Mean Se	ea	UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0						
Date	and the second second	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation		
	10:00	- 10:00 - 10:30 - 13:00	0.50 2.50	DRLPRV DRLPRV DRLPRV	02 07 08	D A B	P P Z		DRILL /SLIDE / SURVEY/ F/ 7,058' TO 7,344' = 286' @ 143 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 118 PUMPS 124 SPM= 558 GPM PUMP PRESSURE ON/OFF BTM 2325/2025 TORQUE ON/OFF BTM 13,000/ 11,000 PICK UP WT 202,000 SLACK OFF WT 123,000 ROT WT 162,000 SLIDE 20' IN 50 MIN 3.75 % OF FOOTAGE DRILLED, 16.67%OF HRS DRILLED MUD WT 8.5 VIS 27 NOV-D WATER 75 BBL WATER LOST SWACO OFF LINE PUMP 10 BBL 6% LCM SWEEPS SERVICE RIG @ 7,344' TROUBLE SHOOT TOP DRIVE / MOTOR ON TDS WENT OUT - BAD AC MOTOR *** TDS FAILURE***		
		- 19:00 - 0:00	6.00 5.00	DRLPRV	08	В	z z		PUMP & SPOT 200 BBL 9.5 PPG 60 VIS TOOH TO SHOE - BIT @ 2,680' - MONITOR & SECURE WELL *** TDS FAILURE *** CHANGE OUT TDS AC MOTOR		
8/29/2012	0:00	- 3:00	3.00	DRLPRV	08	В	Z		*** TDS FAILURE*** CHANGE OUT TDS AC MOTOR / DAMAGED SEALS WHILE INSTALLING AC MOTOR / *** TDS AC MOTOR FAILURE ***		
	_	- 7:30	4.50	DRLPRV	80	В	Z		WAIT ON SEALS FROM GRAND JUNCTION		
		- 13:00 - 17:00	5.50 4.00	DRLPRV	08	В	Ž Z		REPLACE TDS TRACTION MOTOR -GEARBOX SEAL & ATTEMPT TO INSTALL TDS TRACTION MOTOR/ DAMAGED SEALS		
	17:00	- 19:30 - 0:00	2.50	DRLPRV	08	В	z		CHANGE OUT COMPLETE TOP DRIVE DRESS DOWN TOP DRIVE,PIN TDS & SPLIT BLOCKS,USE CRANE AND REMOVE TDS FROM DERRICK WAIT ON NEW TDS TO ARRIVE ON LOCATION / (5 BBL PIT GAIN,CIRC OUT H2O FROM CSG SHOE,SPOT 50 BBLS 10#) 5-8' FLARE INSTALL TDS ***CHANGE OUT TDS***		
8/30/2012		- 12:30	12.50	DRLPRV	08	В	Z		INSTALL TDS & COMPONETS/TEST & CALIBRATE ***		
									C/O TDS ***		
		- 13:00	0.50	DRLPRV	07	Α	Р		RIG SERVICE		
		- 14:30 - 15:30	1.50	DRLPRV DRLPRV	06	С	z z		TRIP BACK IN HOLE AFTER CHANGING OUT TOP DRIVE / BREAK CIRC @ 5,000' SWIVEL PACKING LEAKING CHANGE SWIVEL PACKING		
	15:30	- 18:30	3.00	DRLPRV	06	F	Z		TRIP IN HOLE,TIGHT @ 7,240,WORK TIGHT HOLE, GAIN CIRC, W&R 100' TO BTM 3' FILL *** TRIP BACK TO BTM AFTER RIG REPAIR***		

2/4/2013

9:56:39AM

				U Same	S ROCE	(IES REG	BION							
				Opera	tion S	ummary	/ Report							
Well: MORGAN	STATE 921-36P1BS \	'ELLOW			Spud Date: 7/21/2012									
Project: UTAH-UINTAH Site: MOR			RGAN ST	ATE 921-	36P PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310							
Event: DRILLING Start Date			e: 7/5/201	2			End Date: 9/2/2012							
Active Datum: RKB @5,036.00usft (above Mean Sea Level)					SE/0/9/S	5/21/E/36/0/	0/26/PM/S/440	/E/0/1021/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation						
8/31/2012	18:30 - 0:00 0:00 - 6:00	5.50	DRLPRV DRLPRV	02	В	P		DRILL /SLIDE / SURVEY/ F/ 7,344' TO 7,703' = 359' @ 65.8 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 105 PUMPS 105 SPM= 472 GPM PUMP PRESSURE ON/OFF BTM 1,985/1,665 TORQUE ON/OFF BTM 15,000/ 15,000 PICK UP WT 198,000 SLACK OFF WT 143,000 ROT WT 169,000 SLIDE 35' IN 60 MIN 9.70 % OF FOOTAGE DRILLED, 20%OF HRS DRILLED MUD WT 8.8 VIS 27 NOV-D RUN CONVENTIONAL 550 BBL WATER LOST / 100 BBLS HR SEEPAGE SWACO OFF LINE PUMP 15- BBL 12% LCM SWEEPS W/ANCO FIBER,CALCIUM CARBONATE,MAXI SEAL ,SAWDUST DRILL SURVEY/ F/ 7,703' TO 8,290 = 587' @ 97.8 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 110						
								PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,155/1,825 TORQUE ON/OFF BTM 17,000/ 16,000 PICK UP WT 223,000						
								SLACK OFF WT 174,000 ROT WT 169,000 SLIDE 0 MUD WT 8.8 VIS 30 NOV-D RUN CONVENTIONAL 250 BBL FLUID LOST / 40 BBLS HR SEEPAGE SWACO OFF LINE PUMP 15- BBL 12% LCM SWEEPS,ANCO FIBER,CAL CARB,MAXI SEAL,SAWDUST						

		Service Company		U	S ROC	KIES RI	EGION	
				Opera	ation S	Summa	ary Report	
Well: MORGAN	STATE 921-36P1BS	YELLOW					Spud Date: 7/21/2012	
Project: UTAH-U	INTAH		Site: MOF	RGAN ST	TATE 921	-36P PAE	Rig Name No: H&P 298/298, CAPSTAR 31	0/310
Event: DRILLING			Start Date		12	<u> </u>	End Date: 9/2/2012	
Active Datum: Rh		oove Mean S				S/21/E/36	5/0/0/26/PM/S/440/E/0/1021/0/0	
Level)	- C-,							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)	
	6:00 - 14:30 14:30 - 0:00	9.50	DRLPRV	02	В	P	DRILL SURVEY/ F/ 8,290' TO 8,663 =373' @ FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 99 PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,075/1,829 TORQUE ON/OFF BTM 18,000/ 18,000 PICK UP WT 236,000 SLACK OFF WT 144,000 ROT WT 180,000 SLIDE 102' IN 305 MIN 27.3 % OF FOOTAGE DRILLED, 60%OF HRS DRILLED MUD WT 8.9 VIS 34 NOV-D RUN CONVENTIONAL 65 BBL FLUID LOST / 8-10 BBLS HR SEEPA SWACO ON LINE 8,655, ANN PRESS 170 5-FLARE PUMP 15- BBL 10% LCM SWEEPS,ANCO FI CARB,MAXI SEAL,SAWDUST DRILL, SURVEY/ F/ 8,663' TO 9,345 =682' @ FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 99 PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,140/1,908 TORQUE ON/OFF BTM 20,000/ 19,000 PICK UP WT 243,000 SLACK OFF WT 168,000 ROT WT 189,000 MUD WT 8.9 VIS 34 12%LCM NOV-D RUN CONVENTIONAL 130 BBL FLUID LOST / 10-12 BBLS HR SEEI SWACO ON LINE 8,655, ANN PRESS 250 5-FLARE PUMP 15- BBL 12% LCM SWEEPS,ANCO FI	GE 10' BER,CAL 271.7
	14:30 - 14:30	0.00	DRLPRV	07	Α	Р	CARB,MAXI SEAL,SAWDUST DAILY RIG SERVICE	ou york

					9 전투 15등 전략 - 기업 1 기업 1	S ROC		EGION ary Report	
Well: MORGAN	STATE 9	21-36P1BS	YELLOW				<u> </u>	Spud Date: 7/21/	/2012
Project: UTAH-U	INTAH			Site: MO	RGAN ST	TATE 921	-36P PAE	<u>_</u>	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING				Start Dat	e: 7/5/20°	12	T		End Date: 9/2/2012
Active Datum: RI	<b @5,0<="" th=""><th>36.00usft (a</th><th>bove Mean Se</th><th></th><th></th><th></th><th>S/21/E/36</th><th>5/0/0/26/PM/S/440/I</th><th></th>	36.00usft (a	bove Mean Se				S/21/E/36	5/0/0/26/P M/ S/440/I	
Level)									
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/1/2012	0:00	- 1:30 - 3:30	2.00	DRLPRV	02	B	P	(usit)	DRILL SURVEY/ F/ 9,345 TO 9,452 =682' @ 71.7 FPH WOB 22,000-27,000 TOP DRIVE RPM 40-75 MUD MOTOR RPM 99 PUMPS 105 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,140/1,905 TORQUE ON/OFF BTM 20,000/ 19,000 PICK UP WT 243,000 SLACK OFF WT 168,000 ROT WT 189,000 MUD WT 8,9 VIS 34 12%LCM NOV-D RUN CONVENTIONAL 10 BBL FLUID LOST / SWACO ON LINE 8,655, ANN PRESS 250 5-10' FLARE SURVEY @9,170 INC .38 AZ 170.08 18;SOUTH 5' EAST OF CENTER @9,350 DISPLACE HOLE W/ 10,9# 15%/SWACO OFF LINE / WHILE DRILLING / LOST 75 BBLS SEEPAGE @ 9,452 LOST RETURNS BUILD VOL /PUMP 180 BBLS 15% LCM SWEEPS @ 10.3# / NO RETURNS *** LOST CIRCULATION***
	3:30	- 6:00	2.50	DRLPRV	06	К	X		TOH / BACK REAM OUT 7 STDS PUMPING @ 60 SPM /90 BBLS / NO RETURNS / STRAIGHT PULL TO 7,800' PUMP 50 BBLS 10.3 20% DOWN BACK SIDE /HOLE FULL /PUMP DOWN DP, PARTICAL RETURNS AFTER PUMPING 50 BBLS / BUILD VOL CIRC W/ 50% RETURNS@ 60 SPM 10.3 LCM 20%/ 35 BBL LOSS
	6:00	- 8:00	2.00	DRLPRV	05	В	Х		ČÍŘĆ W/ FULL RETURNS BUILD VOL RAISE MUD WT TO 10.9# 20% LCM
	8:00	- 9:30	1.50	DRLPRV	06	K	X		STAGE BACK IN HOLE CIRC @ 8,600, WASH LAST STAND TO BTM 9,452 / NO FILL
	9:30	- 10:30 - 12:00	1.00	DRLPRV DRLPRV	02 05	В	P P		DRILL TO TD 9,510 10-15' FLARE /FINAL SURVEY @9,450 POSITION IN TARGET 21' SOUTH 7' EAST CIRC AND COND F/ CASING MUD WT TO 11.2# 5'
				5.12.111	•	Ů	•		FLARE
	12:00	- 19:00	7.00	DRLPRV	06	D	Р		TRIP OUT FOF CASING SPOT 80 BBLS 12# ON BTM,FLOW CHECK @ CASING SHOE,LAY DOWN DIRECTIONALTOOLS
	19:00	- 20:00	1.00	CSGPRO	14	В	Р		PULL BEARING ASSEMBLY, PULL WEAR BUSHING, INSTALL CASING NIPPLE
		- 20:30	0.50	CSGPRO	12	Α	P		CHANGE OUT DRILLING BAILS TO CASING BAILS
		- 21:30	1.00	CSGPRO	12	Α	P		CTJSA RIG UP FRANKS CASING EQUIP
9/2/2012	0:00	- 6:00 - 6:00	2.50 6.00	CSGPRO	12 12	c c	P P		MAKE UP FLOAT EQUIP RIH, & TEST,RUNNING 41/2 CASING @ 2,650' RUN 105 JTS I-80 11.6# LTC 4.5 CASING +1 CROSSOVER LTC/ DQX 117 JTS I-80 11.6# DQX 4.5 CASING+ RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / LANDING
								_	CASING MANDREL IN BOWL W/98,000, @ 9,500 FOR CIRC & CEMENTING / SHOE @9,500 / FC @ 9,456 / MV MKR @ 7,256 X/0 @ 5,035 ,

Operation Summary Report

Well: MORGAN STATE 921-36P1BS YELLOW Spud Date: 7/21/2012 Project: UTAH-UINTAH Site: MORGAN STATE 921-36P PAD Rig Name No: H&P 298/298, CAPSTAR 310/310 Event: DRILLING Start Date: 7/5/2012 End Date: 9/2/2012

Active Datum: RKB @5,036.00usft (above Mean Sea

UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0

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Leve								,	
laye Taye	Date	later in the second	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
		6:00	- 7:00	1.00	CSGPRO	12	В	Р	CTJSA AND RIG DOWN CASERS
		7:00	- 9:00	2.00	CSGPRO	05	D	Р	CIRC CASING ,CT JSA RU BJ CEMENTERS
		9:00	- 12:00	3.00	CSGPRO	12	E	P	INSTALL BJ CMT HEAD, TEST PUMP & LINES TO 4,933 PSI, ,DROP BOTTOM PLUG PUMP 25 BBLS FW PUMP 456 SKS LEAD CEMENT @ 12.0 PPG,(183.5 BBLS) (PREM LITE II + .0.25 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 6% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + 0.2 % R-3 +0.4%bwoc FL-52 100.1% FRESH WATER / (12.48 gal/sx, 2.26 yield) + 1,154 SX TAIL @ 14.3 ppg (271.3 BBLS)+ (CLS G 50/50 POZ + 10% SALT + .005 llbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE +0.5%EC-1+ 58.9% FW / (5.94 gal/sx, 1.32 yield) WASH PUMP & LINES DROP TOP PLUG & DISPLACE W/ 147.0 BBLS H2O + ADDITIVES / PLUG DOWN @11:48 HOURS / FLOATS HELD W/ 2 BBLS H2O RETURNED TO INVENTORY/ PARTICAL RETURNS @ 129 BBLS IN DISPLACEMENT8 BBLS SPACER TO SURFACE / NO CEMENT / LIFT PRESSURE @ 2,627 PSI BUMP PRESSURE @3,241 / TOP OF TAIL CEMENT CALCULATED @ 4,160° R/D BJ
		12:00	- 13:30	1.50	CSGPRO	14	В	Р	FLUSH BOP'S & EQUIPMENT / SET PACK OFF WITH CAMERON / LAY DOWN RUNNING TOOL / CHANGE OUT BAILS
		13:30	- 14:30	1.00	RDMO	14	Α	Р	/NIPPLE DOWN BOP & EQUIPMENT / PREP FOR SKID / RELEASE RIG @ 14:30 HRS 09/02/2012 TO MORGAN STATE 921-36I4CS

2/4/2013

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	MORGAN STATE 921-36P1BS YELLOW	Wellbore No.	ОН
Well Name	MORGAN STATE 921-36P1BS	Wellbore Name	MORGAN STATE 921-36P1BS
Report No.	1	Report Date	10/16/2012
Project	UTAH-UINTAH	Site	MORGAN STATE 921-36P PAD
Rig Name/No.		Event	COMPLETION
Start Date	11/28/2012	End Date	1/17/2013
Spud Date	7/21/2012	Active Datum	RKB @5,036.00usft (above Mean Sea Level)
UWI	SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0	•	

1.3 General

Contractor	Job Method	Supervisor	
Perforated Assembly	Conveyed Method		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fluid Density	Gross Interval	6,084.0 (usft)-9,359.0 (usft	Start Date/Time	12/14/2012 12:00AM
Surface Press		Estimate Res Press	No. of intervals	69	End Date/Time	12/14/2012 12:00AM
TVD Fluid Top		Fluid Head	Total Shots	240	Net Perforation Interval	80.00 (usft)
Hydrostatic Press		Press Difference	Avg Shot Density	3.00 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL				Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ CC	cr@ cc	L-T MD Top	MD Base	Shot	Misfires/	Diamete	Carr Type /Stage No	Carr	Phasing	Charge Desc /Charge	Charge	Reason	Misrun
	Reservoir (u	ısft) (s (us	(usft)	(usft)	Density (shot/ft)	Add. Shot	r (in)		Size	(9)	Manufacturer	Weight		
12/14/201	WASATCH/		6,084.0	6,086.0	3.00	Court of the second		EXP/	3.375	120.00	<u>6 1 a. 1 (1885 a) - 1 1 (1743</u>	(gram) 23.00	PRODUCTIO	Land State
2													N	
12:00AM														

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carri Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/14/201 2 12:00AM	WASATCH/	Consequential Consequence of the	A distinct in a consequence	6,099.0	6,101.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	O TOTAL CONTINUES AND A STATE OF THE STATE O
	WASATCH/		ALIO CHIRESTIA ANNO ANNO ANNO ANNO ANNO ANNO ANNO AN	6,162.0	6,164.0	3.00	CONTRACTOR	0.360	EXP/	3.375	120.00	A 16.	23.00	PRODUCTIO N	The state of the s
	WASATCH/			6,230.0	6,232.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	WASATCH/			6,488.0	6,489.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	WASATCH/			6,575.0	6,576.0	3.00		0.360	EXP/	3.375	120,00		23.00	PRODUCTIO N	
	WASATCH/		The same of the sa	6,627.0	6,628.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	WASATCH/		THE STREET STREE	6,645.0	6,646.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	WASATCH/			6,678.0	6,680.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2 12:00AM	WASATCH/	And the second s		6,729.0	6,730.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	······
12/14/201 2 12:00AM	WASATCH/			6,772.0	6,773.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	WASATCH/		and the second s	6,844.0	6,845.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	WASATCH/			6,904.0	6,905.0	3.00		0.360	EXP/	3.375	120.00		3	PRODUCTIO N	
	WASATCH/			6,935.0	6,936.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	WASATCH/		**************************************	6,961.0	6,962.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add, Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
2	WASATCH/		(doing	6,980.0	6,982.0			0.360	EXP/	3.375	120.00	andie (* 1. a.) Eddan, geber (* 1861)		PRODUCTIO N	Hilliade
12:00AM 12/14/201 2 12:00AM	WASATCH/			7,079.0	7,081.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			7,335.0	7,336.0	3.00		0.360	EXP/	3.375	120.00	***************************************	23.00	PRODUCTIO N	
	MESAVERDE/			7,347.0	7,348.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12/14/201 2	MESAVERDE/			7,356.0	7,357.0	3.00	and the second s	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
2	MESAVERDE/			7,387.0	7,388.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM 12/14/201 2 12:00AM	MESAVERDE/		and open control of the control of t	7,401.0	7,402.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/	1.000		7,413.0	7,414.0	3.00	CEMIL OF CONTRACT AND ADMINISTRATION OF THE CONTRAC	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/	Personal Section 1		7,460.0	7,461.0	3.00	material and the property of t	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	and the second s
12/14/201 2 12:00AM	MESAVERDE/			7,477.0	7,478.0	3.00	and the second s	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			7,700.0	7,701.0	3.00	a special section of the section of	0.360	EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/		THE PERSON AND ASSESSMENT ASSESSM	7,746.0	7,747.0	3.00	and an analysis of the second	0.360	EXP/	3.375	120.00			PRODUCTIO N	
1	MESAVERDE/		White the second	7,763.0	7,764.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	The state of the s
	MESAVERDE/	Por distance of the second sec	A CONTRACTOR OF THE CONTRACTOR	7,789.0	7,790.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	To the state of th

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add, Shot	Diamete r. (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12/14/201 2 12:00AM	MESAVERDE/	77777		8,391.0	8,392.0		THE SOLVE CONTRACTOR	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/			8,405.0	8,406.0	3.00	der er en	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
	MESAVERDE/	and the second s	The state of the s	8,443.0	8,444.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
12/14/201 2	MESAVERDE/			8,484.0	8,485.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	AL-MILLA THEMP AND LATERALITY
2	MESAVERDE/	WHI H minum	and the second s	8,502.0	8,503.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	A CONTRACTOR OF THE CONTRACTOR
2	MESAVERDE/			8,583.0	8,584.0	3.00	7.7827771117	0.360	EXP/	3.375	120.00			PRODUCTIO N	
12:00AM 12/14/201 2 12:00AM	MESAVERDE/		1-	8,609.0	8,610.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	The state of the s
	MESAVERDE/		TO THE PARTY OF TH	8,674.0	8,675.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
***************************************	MESAVERDE/			8,684.0	8,685.0	3.00		0.360	EXP/	3.375	120.00		- 1	PRODUCTIO N	
	MESAVERDE/			8,706.0	8,707.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
*** ** * * * * * * * * * * * * * * * * *	MESAVERDE/			8,764.0	8,765.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
	MESAVERDE/		THE RESERVE OF THE PERSON OF T	8,789.0	8,790.0	3.00	-	0.360	EXP/	3.375	120.00	The state of the s	1	PRODUCTIO N	
	MESAVERDE/	Annual Control of the		8,826.0	8,827.0	3.00		0.360	EXP/	3.375	120.00		i	PRODUCTIO N	
	MESAVERDE/	The state of the s		8,905.0	8,906.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc/Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
2	MESAVERDE/			8,951.0	8,952.0	3.00		0.360	EXP/	3.375	120.00		i	PRODUCTIO N	
12:00AM									~~~~						
12/14/201 2 12:00AM	MESAVERDE/		TOWNS THE PROPERTY OF THE PROP	9,006.0	9,007.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	The second of th
v	MESAVERDE/			9.025.0	9.026.0	3.00		0.360	EYDI	3.375	120.00	IAL N. E. M. Salahan Salahan	23.00	PRODUCTIO	
2	MESAVERDE			9,025.0	9,020.0	3.00		0.560	EAF/	3.373	120.00		1	N	
12:00AM	Birth A													•	
2	MESAVERDE/			9,067.0	9,068.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
12:00AM			ļ	0.000.0	0.004.0			0.000	EVD:		400.00			DDODUGTIO	<u> </u>
12/14/201	MESAVERDE/			9,080.0	9,081.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
12:00AM						-					and the same of th			IN .	
ARREST TO THE RESIDENCE	MESAVERDE/			9,091.0	9,092.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			9,112.0	9,113.0	3.00		0.360	EXP/	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			9,253.0	9,254.0	3.00		0.360	EXP/	3.375	120.00		1	PRODUCTIO N	
12:00AM			- C - C - C - C - C - C - C - C - C - C									TOTAL STATE OF THE			
2	MESAVERDE/		WARA A STATE OF THE STATE OF TH	9,305.0	9,306.0	3.00		0.360	EXP/	3.375	120.00		· ·	PRODUCTIO N	
12:00AM	· · · · · · · · · · · · · · · · · · ·														
12/14/201 2 12:00AM	MESAVERDE/			9,323.0	9,325.0	3.00	were represented to the second	0.360	EXP	3.375	120.00			PRODUCTIO N	
	MESAVERDE/			9,336.0	9,338.0	3.00	i i	0.360	EYDI	3.375	120.00		23 00	PRODUCTIO	
2 12:00AM	WEOAVERDE/	and the state of t		9,330.0	9,330.0	3.00	and the state of t	0.360		3.373	120.00	1		N PRODUCTIO	
	MESAVERDE/	<u> </u>		9,357.0	9,359.0	3.00		0.360	EXP/	3,375	120.00	A second control of the second control of th	23.00	PRODUCTIO	
2 12:00AM					-,		and the second						1	N	

3 Plots

Operation Summary Report

Well: MORGAN STATE 921-36P1BS YELLOW	Spud Date: 7/21/2012							
Project: UTAH-UINTAH	Site: MORGAN STATE 921-3	36P PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3					
Event: COMPLETION	Start Date: 11/28/2012		End Date: 1/17/2013					

Active Datum: RKB @5,036.00usft (above Mean Sea UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0

Level)									
Date	A # 25 - 9 **	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/21/2012		-							
10/16/2012	12:30	- 12:45	0.25	FRAC	33	С	P		RU HOT OILER, FILLED SURFACE W/ 1/2 BBL TMAC PRESSURED TO 1500, PSI NO BLEED OFF, BLED WELL DOWN SWIFN
10/17/2012		-							
12/18/2012	13:00	- 13:30	0.50	FRAĆ	33	С	Р		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. 1ST PSI TEST T/7000 PSI. HELD FOR 15 MIN LOST 63 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL SWIFN
12/28/2012	7:00	- 10:00	3.00	FRAC	37	В	P		HSM, RIGGING UP / PERF STG #1] P/U RIH PERF GUN, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE,
1/1/2013	6:30	- 6:45	0.25	FRAC	48		Р		HSM, ICE PLUGS / HIGH PRESSURE

	Op		KIES RE Summa	GION ry Report	
Well: MORGAN STATE 921-36P1BS YELLOW	<u> 20. 28/38/80/2/20</u>	Transport of Control Con		Spud Date: 7/21/2	2012
Project: UTAH-UINTAH	Site: MORGA	N STATE 92	1-36P PAD		Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION S	Start Date: 11	/28/2012			End Date: 1/17/2013
Active Datum: RKB @5,036.00usft (above Mean Sea Level)	uv	VI: SE/SE/0/9	/S/21/E/36/	/0/0/26/PM/S/440/E	5/0/1021/0/0
Date Time Duration P Start-End (hr)	Phase Co	ode Sub Code	P/U	MD From (usft)	Operation
6:45 - 18:00 11.25 F	RAC S	36 B	P		PERF & FRAC FOLLOWING WELL AS PER DESIGN W/ 30/50 MESH SAND & SLK WTR. ALL CBP'S ARE HALIBURTON 8K CBP'S.
					REFER TO STIM PJR FOR FLUID, SAND AND CHEMICL VOLUME PUM'D
					FRAC STG #1] WHP=1,165#, BRK DN PERFS=4,1552#, @=4.2 BPM, INJ RT=47.6, INJ PSI=5,609#, INITIAL ISIP=2,439#, INITIAL FG=.70, FINAL ISIP=2,817#, FINAL FG=.74, AVERAGE RATE=46.5, AVERAGE PRESSURE=6,004#, MAX RATE=50.8, MAX PRESSURE=8,262#, NET PRESSURE INCREASE=378#, 18/24 75% CALC PERFS OPEN. X OVER TO WIRE LINE
					PERF STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,143', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW [SET PLUG SHOT BOTTOM 4 ZONES GUN SHORTED OUT HAD TO POOH FIX PROBLEM, RIH SHOT TOP 4 ZONES]
					FRAC STG #2] WHP=1,479#, BRK DN PERFS=4,277#, @=6.3 BPM, INJ RT=44.2, INJ PSI=5,402#, INITIAL ISIP=2,414#, INITIAL FG=.71, FINAL ISIP=2,533#, FINAL FG=.72, AVERAGE RATE=49.8, AVERAGE PRESSURE=5,783#, MAX RATE=50.6, MAX PRESSURE=6,321#, NET PRESSURE INCREASE=119#,17/24 71% CALC PERFS OPEN. X OVER TO WIRE LINE
					PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,857', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
					FRAC STG #3] WHP=374#, BRK DN PERFS=3,552#, @=4.3 BPM, INJ RT=42.6, INJ PSI=5,485#, INITIAL ISIP=1,919#, INITIAL FG=.66, FINAL ISIP=2,486#, FINAL FG=.72, AVERAGE RATE=48.1, AVERAGE PRESSURE=5,946#, MAX RATE=51.3, MAX PRESSURE=6,152#, NET PRESSURE INCREASE=576#, 15/24 63% CALC PERFS OPEN. X OVER TO WIRE LINE
					PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,533', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW. SWIFN.

Operation Summary Report

Project: UTAH-UINTA	Н		Site: MO	RGAN ST	ATE 921-	36P PAD		Rig Name No. ROCKY MOUNTAIN MELL SERVICE
								Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION		<u>-</u>		e: 11/28/2	012			End Date: 1/17/2013
Active Datum: RKB @ Level)	5,036.00usft (ab	oove Mean Se	а	UWI: SE	E/SE/0/9/9	S/21/E/36	/0/0/26/PM/S/440/	E/0/1021/0/0
Date	Time - Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/2/2013 6:3	0 - 18:00	11.50	FRAC	36	В	Р		CONT PERF AND FRAC.
								FRAC STG 4) WHP 1685 PSI, BRK 4453 PSI @ 4.2 BPM. ISIP 2448 PSI, FG .0.73, CALC PERFS OPEN @ 44.8 BPM @ 5292 PSI = 75% HOLES OPEN. 0 ISIP 2191 PSI, FG .0.7, NPI -257 PSI. 0 MP 6460 PSI, MR 52 BPM, AP 5879 PSI, AR 48.1 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8267', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 5) WHP 797 PSI, BRK 5337 PSI @ 4.7 BPM. ISIP 1774 PSI, FG .0.66, CALC PERFS OPEN @ 36.1 BPM @ 5147 PSI = 63% HOLES OPEN. 0 ISIP 2262 PSI, FG .0.72, NPI 488 PSI. 0 MP 6819 PSI, MR 49.9 BPM, AP 5646 PSI, AR 46.5 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7977', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE, AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
1/3/2013 7:0	0 - 18:00	11.00	FRAC	36	В	Р		SWI. DRAIN EQUIP. CONT PERF AND FRAC.
								FRAC STG 6) WHP 315 PSI, BRK 3344 PSI @ 4.8 BPM. ISIP 1654 PSI, FG .0.65, CALC PERFS OPEN @ 46.7 BPM @ 5914 PSI = 63% HOLES OPEN. (24/24 HOLES OPEN) 15 ISIP 2188 PSI, FG .0.72, NPI 534 PSI. 0 MP 6138 PSI, MR 49 BPM, AP 5216 PSI, AR 47.6 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7508', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 7) WHP 584 PSI, BRK 2549 PSI @ 4.7 BPM. ISIP 1267 PSI, FG .0.61, CALC PERFS OPEN @ 48.9 BPM @ 4885 PSI = 67% HOLES OPEN. (24/24 HOLES OPEN) 0 ISIP 2010 PSI, FG .0.71, NPI 743 PSI. 0 MP 5235 PSI, MR 49.7 BPM, AP 4448 PSI, AR 48.4 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=71111', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
1/4/2013 7:0)Ö - 18:00	11.00	FRAC	46	Ē	Z		SWI. DRAIN EQUIP. SAND MOVER BROKE DOWN.

Vell: MORGAN S	STATE 9	21-36P1BS	YELLOW				Spu	d Date: 7/21/2012
Project: UTAH-UI	NTAH			Site: MOI	RGAN ST	ATE 921-	36P PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
vent: COMPLET	TON			Start Date	e: 11/28/2	2012		End Date: 1/17/2013
ctive Datum: RK	(B @5,0	36.00usft (a	bove Mean S				S/21/E/36/0/0/26	6/PM/S/440/E/0/1021/0/0
ell: MORGAN STATE 921-36P1BS Y oject: UTAH-UINTAH vent: COMPLETION ctive Datum: RKB @5,036.00usft (above) Date Time Start-End 1/5/2013 6:00 - 18:00								
Date -	2.5		Duration (hr)	Phase	Code	Sub Code	P/U M	ID From Operation (usft)
1/5/2013	6:00	- 18:00	12.00	FRAC	36	В	P	CONT PERF AND FRAC.
								FRAC STG 8) WHP 205 PSI, BRK 2842 PSI @ 3.2 BPM. ISIP 1809 PSI, FG .0.7, CALC PERFS OPEN @ 44.7 BPM @ 6096 PSI = 63% HOLES OPEN. ISIP 1988 PSI, FG .0.72, NPI 179 PSI. 0 MP 6768 PSI, MR 46.9 BPM, AP 6026 PSI, AR 43 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #9] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6803', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 9) WHP 405 PSI, BRK 3026 PSI @ 2.1 BPM. ISIP 1362 PSI, FG .0.64, CALC PERFS OPEN @ 42.6 BPM @ 5503 PSI = 63% HOLES OPEN. (24/24 HOLES OPEN) ISIP 1866 PSI, FG .0.72, NPI 504 PSI. MP 6746 PSI, MR 51.1 BPM, AP 5362 PSI, AR 46.2 BPM, PUMPED 30/50 OWATTA SAND.
								PERF STG #10] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6262', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW.
								FRAC STG 10) WHP 214 PSI, BRK 1729 PSI @ 4.7 BPM. ISIP 984 PSI, FG .0.6, CALC PERFS OPEN @ 48.2 BPM @ 4852 PSI = 63% HOLES OPEN. (24/24 HOLES OPEN) 0 ISIP 1122 PSI, FG .0.62, NPI 138 PSI. 0 MP 6072 PSI, MR 52.6 BPM, AP 4868 PSI, AR 49.2 BPM, PUMPED 30/50 OWATTA SAND.
								RIH W/ WIRELINE. SET HAL 8K CBP (KILL PLUG) @6034'. POOH W/ WIRELINE. SWI. FRAC COMPLETE.
1/16/2013	7:00	- 7:15	0.25	DRLOUT	48		Р	TOTAL SAND PUMPED =252,180# TOTAL FLUID PUMPED = 11,062 BBLS HSM-JSA
	7:15	- 15:00	7.75	DRLOUT	31	1	P	MIRU, NDWH, NUBOP, PU 3 7/8" BIT & POBS W/ XN SN RIH W/ 191 JTS 2 3/8" L-80 TAG FILL @ 6,019', POOH LD 2 JTS TBG, RU PWR SWVL, SWI, SDFN.
1/17/2013	7:00	- 7:15	0.25	DRLOUT	48		Р	HSM-JSA

	G OS±a				Ü	S ROC	KIES R	EGION	
Spage 1					Opera	tion S	Summ	ary Report	
Well: MORGAN	STATE 92	21-36P1BS `	YELLOW	- <u> </u>		2004	14.709 No. 14.00	Spud Date: 7/2	1/2012
Project: UTAH-U	IINTAH			Site: MOI	RGAN ST	ATE 921	1-36P PAI)	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLE	TION			Start Date	e: 11/28/2	2012			End Date: 1/17/2013
Active Datum: RI Level)	KB @5,03	36.00usft (ab	ove Mean Se	ea	UWI: SI	E/SE/0/9	/S/21/E/36	3/0/0/26/PM/S/440	0/E/0/1021/0/0
Date	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ime irt-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation .
	7:15	- 16:00	8.75	DRLOUT	44	С	Р	and the same of th	PU 2 JTS TBG TAG FILL @ 6,019', BRK CIRC PRESS TEST BOP TO 3,000 PSI LOST 0 PSI IN 15 MIN.
									C/O 15' SAND TAG PLUG #1 @ 6,034', DRL HAL 8K CBP IN 7 MIN, 100 PSI INC, FCP 50 PSI, RIH TAG FILL @ 6,242'.
									C/O 20' SAND TAG PLUG #2 @ 6,262', DRL HAL 8K CBP IN 8 MIN, 0 PSI INC, FCP 50 PSI, RIH TAG FILL @ 6,768'.
									C/O 35' SAND TAG PLUG #3 @ 6,803', DRL HAL 8K CBP IN 6 MIN, 100 PSI INC, FCP 50 PSI, RIH TAG FILL @ 7,051'.
									C/O 60' SAND TAG PLUG #4 @ 7,111', DRL HAL 8K CBP IN 6 MIN, 400 PSI INC, FCP 150 PSI, RIH TAG FILL @ 7,478'.
									C/O 30' SAND TAG PLUG #5 @ 7,508', DRL HAL 8K CBP IN 8 MIN, 350 PSI INC, FCP 200 PSI, RIH TAG FILL @ 7,887'.
									C/O 90' SAND TAG PLUG #6 @ 7,977', DRL HAL 8K CBP IN 7 MIN, 450 PSI INC, FCP 300 PSI, RIH TAG FILL @ 8,237'.
									C/O 30' SAND TAG PLUG #7 @ 8,267', DRL HAL 8K CBP IN 5 MIN, 300 PSI INC, FCP 450 PSI, RIH TAG FILL @ 8,508'.
									C/O 25' SAND TAG PLUG #8 @ 8,533', DRL HAL 8K CBP IN 8 MIN, 250 PSI INC, FCP 450 PSI, RIH TAG FILL @ 8,827'.
									C/O 30' SAND TAG PLUG #9 @ 8,857', DRL HAL 8K CBP IN 6 MIN, 200 PSI INC, FCP 500 PSI, RIH TAG FILL @ 9,113'.
									C/O 30' SAND TAG PLUG #10 @ 9,143', DRL HAL 8K CBP IN 6 MIN, 400 PSI INC, FCP 650 PSI, RIH TAG FILL @ 9,425' (66' BLW BTM PERF) CIRC CLEAN, RD PWR SWVL, POOH LD 17 JTS TBG, LAND TBG W/ 280 JTS 2 3/8" L-80 EOT @ 8,891.68', RD FLOOR & TBG EQUIP, NDBOP, NUWH, DROP BALL POBS @ 2,200 PSI, PRESS TEST FLOWLINE BETWEEN HAL 9,000 & WELLHEAD TO 3,000 PSI, LET BIT FALL 20 MIN, TURN OVER TO FBC, RDMO, WINTERIZE EQUIP, SDFN.
									KB-26' HANGER83' 280 JTS 2 3/8" L-80-8,862.65' POBS W/ XN SN-2.20' EOT @ 8,891.68'

US ROCKIES REGION Operation Summary Report Well: MORGAN STATE 921-36P1BS YELLOW Spud Date: 7/21/2012 Project: UTAH-UINTAH Site: MORGAN STATE 921-36P PAD Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3 **Event: COMPLETION** Start Date: 11/28/2012 End Date: 1/17/2013 UWI: SE/SE/0/9/S/21/E/36/0/0/26/PM/S/440/E/0/1021/0/0 Active Datum: RKB @5,036.00usft (above Mean Sea Level) Date Phase Duration Code P/U Time Sub MD From Operation Start-End Code (hr) (usft) 315 JTS DEL 280 JTS USED 35 JTS RET TWTR=11,362 BBLS TWR=3,036 BBLS TWLTR=8,326 BBLS 16:00 - 16:00 0.00 DRLOUT 50 WELL TURNED TO SALES @ 1500 HR ON 1/17/2013. 2600 MCFD, 1920 BPWD, FCP 2250#, FTP 2500#, 20/64" CK. 7:00 1/25/2013 50 WELL IP'D ON 1/25/13 - 2071 MCFD, 0 BWPD, 0 BOPD, CP 2348#, FTP 1570#, LP 97#, 24 HRS, CK 20/64

FORMATION TOP DETAILS Project: UTAH - UTM (feet), NAD27, Zone 12N Site: UINTAH MORGAN STATE 921-36P PAD TVDPath 4520.00 Formation WASATCH Well: MORGAN STATE 921-36P1BS 4661.77 Wellbore: MORGAN STATE 921-36P1BS 5120.00 7156.00 5261.78 INTERCEPT Section: 7297 81 MESAVERDE SHI : 9337.00 Design: MORGAN STATE 921-36P1BS (wp01) Latitude: 39.986582 Longitude: -109.493622 GL: 5010.00 KB: 26' RKB + 5010' GL @ 5036.00ft Azimuths to True North CASING DETAILS WELL DETAILS: MORGAN STATE 921-36P1BS Magnetic Field Strength: 52209.8snT Dip Angle: 65.83° Date: 8/1/2012 TVD MD Ground Level: 5010.00 Name Size Northing 14524723.42 Easting 2062381.47 +N/-S Latittude 39.986582 2543.24 2646.01 Longitude -109.493622 Slot 8-5/8 8-5/8 0.00 0.00 Model: IGRF2010 DESIGN TARGET DETAILS +N/-S 814.16 +E/-W Northing Easting Latitude Shape Circle (Radius: 15.00) Longitude -109.491799 DRILLERS TARGET_MORGAN STATE 921-36P1BS 4328.28 510.68 14525546.09 2062878.32 39.988817 INTERCEPT MORGAN STATE 921-36P1BS 5120.00 810,78 14525542.76 513.27 2062880.97 39 988808 -109.491790 **Point** MORGAN STATE 921-36P1BS 25' CYLINDER 9337.00 791.43 14525523.66 528.11 2062896.12 39.988755 -109.491737 Circle (Radius: 25.00) SECTION DETAILS MD Inc Azi **TVD** +N/-S +E/-W Dleg **TFace VSect** 2647.00 18.55 31.33 2544.18 535.99 341.35 0.00 0.00 635.32 2857.00 18.55 31.33 2743.27 593.06 376.09 0.00 0.00 702.07 4470.05 0.00 31.33 4328.28 814.16 510.68 1.15 180.00 960.69 4580.48 0.33 142.53 4438.71 813.91 510.88 0.30 142.53 960.59 9478.85 0.33 142.53 9337.00 791.43 528.11 0.00 0.00 951.45 MORGAN STATE 921-3614BS (WDOL) 9000 1350 4000 1200 1000 9000 1050 INTERCEPT MORGAN STATE 921-35PTES 2000 8-5/8 MORGAN STATE 921-36P1BS 25' CYLIND 900 3000 5000 000 fVIn) MORGAN STATE 921-36 300 DRILLERS TARGET_MORGAN STATE 921-36 DRILLERS TARGET_MORGAN STATE 921-36F BS (2000 f 4000 South(-)/North(+) 3000 Depth WASATCH 600 Vertical 5000 MORGAN STATE 921-36P1BS (wp INTERCEPT 450 BOOD INTERCEPT MORGAN STATE 921-36P1BS 2000 300 7000 MORGAN STATE 921-36P1BS MESAVERDE 150 8000 MORGAN STATE 921-36P1BS 25' CYLINDER 000 2000 MORGAN STATE 921-36P4BS (WD 9000 13-36 OFFSET SEGO MORGAN STATE 921-36P1BS (wp01) 10000 -150 300 450 600 750

-1000

-2000

2000

3000

1000

Vertical Section at 33,71° (2000 ft/in)

West(-)/East(+) (300 ft/in)

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N UINTAH_MORGAN STATE 921-36P PAD MORGAN STATE 921-36P1BS

MORGAN STATE 921-36P1BS

Design: MORGAN STATE 921-36P1BS

Standard Survey Report

04 September, 2012

Survey Report

Company: US ROCKIES REGION PLANNING Project: UTAH - UTM (feet), NAD27, Zone 12N Site: UINTAH MORGAN STATE 921-36P PAD Well: MORGAN STATE 921-36P1BS Wellbore: MORGAN STATE 921-36P1BS

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:

Well MORGAN STATE 921-36P1BS 26' RKB + 5010' GL @ 5036.00ft 26' RKB + 5010' GL @ 5036.00ft

True

Minimum Curvature

UTAH - UTM (feet), NAD27, Zone 12N Project

MORGAN STATE 921-36P1BS

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 (NADCON CONUS)

Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Site **UINTAH_MORGAN STATE 921-36P PAD**

Site Position: From:

Design:

Map Zone:

Lat/Long

Northing: Easting:

14.524.732.11 usft 2,062,399,53 usft

Latitude: Longitude:

39 986605 -109.493557

Position Uncertainty:

0.00 ft

Slot Radius:

13-3/16 "

Grid Convergence:

0.97°

Well MORGAN STATE 921-36P1BS

Well Position +N/-S +E/-W

0.00 ft 0.00 ft Northing: Easting:

14,524,723.43 usft 2,062,381.46 usft Latitude: Longitude:

39.986582 -109.493622

Position Uncertainty

0.00 ft Wellhead Elevation: ft

Ground Level:

5,010.00 ft

	IGRF2010	8/1/2012	10.93	65.83	52,210
Magnetics		ample Date	Declination [Dip Angle F (°)	ield Strength (nT)
Wellbore	MORGAN STATE 921-36P1B3	ekerene o dana da ka samar.			i filoso para par de esta el combo esta en se

Design MORGAN STATE 921-36P1BS **Audit Notes:** Version: 1.0 Phase: **ACTUAL** Tie On Depth: 17.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 17.00 0.00 0.00 34.72

Survey Program 9/4/2012 From To (ft) Survey (Wellbore) **Tool Name** Description 248.00 2,647.00 Survey #1 (MORGAN STATE 921-36P1BS MWD MWD - STANDARD 2,746.00 9,510.00 Survey #2 (MORGAN STATE 921-36P1BS MWD MWD - STANDARD

Measured Depth			Vertical		Maria de Carlos de C Porto de Alexandro de Carlos d	Vertical	Dogleg	Build	Turn
(ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
17.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00
248.00	0.39	236.75	248.00	-0.43	-0.66	-0.73	0.17	0.17	0.00
338.00	0.88	46.18	338.00	-0.12	-0.41	-0.34	1.41	0.54	188.26
429.00	3.34	30.54	428.93	2.65	1.44	2.99	2.75	2.70	-17.19
522.00	4.48	29.74	521.71	8.13	4.62	9.31	1.23	1.23	-0.86
617.00	6.07	29,48	616.30	15.73	8.93	18.01	1.67	1.67	-0.27
711.00	8.09	31.50	709.58	25.70	14.83	29.57	2.16	2.15	2.15
804.00	10.21	34.13	801.39	38.10	22.87	44.34	2.32	2.28	2.83
900.00	11.97	31.70	895.60	53.61	, 32.88	62,80	1.90	1.83	-2.53
993,00	13.98	34.31	986.22	71.10	44.28	83.66	2.25	2.16	2.81

Survey Report

Company: Project: US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

Site: UINTAH_MORGAN STATE 921-36P PAD
Well: MORGAN STATE 921-36P1BS

Wellbore: MORGAN STATE 921-36P1BS
Design: MORGAN STATE 921-36P1BS

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well MORGAN STATE 921-36P1BS

26' RKB + 5010' GL @ 5036.00ft 26' RKB + 5010' GL @ 5036.00ft

True

Minimum Curvature

edmp

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
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1,087.00	14.48	34.11	1,077.34	90.21	57.27	106.77	0.53	0.53	-0.21
1,182.00	15.65	35.72	1,169.07	110.45	71.41	131.46	1.31	1.23	1.69
1,279.00	17.94	36.34	1,261.93	133.11	87.91	159.47	2.37	2.36	0.64
1,372.00	20.49	35.37	1,349.74	157.92	105.82	190.07	2.76	2.74	-1.04
1,466.00	20.93	28,25	1,437.68	186.13	123.29	223.21	2.72	0.47	-7.57
1,557.00	21.02	27.64	1,522.65	214.91	138.56	255.56	0.26	0.10	-0.67
1,650.00	20.49	29.49	1,609.61	243.85	154.31	288.32	0.91	-0.57	1.99
1,745.00	19.61	31.41	1,698.86	271.93	170.80	320.79	1.16	-0.93	2.02
1,837.00	21,10	33.52	1,785.11	298.91	187.99	352.76	1.81	1,62	2.29
1,932.00	21.72	34.40	1,873.55	327.67	207.37	387.44	0.74	0.65	0.93
2,026.00	20.75	31.33	1,961.17	356.25	225.85	421.46	1.57	-1.03	-3.27
2,120.00	21.02	31.59	2,049.00	384.83	243.34	454.91	0.30	0.29	0.28
2,214.00	20.66	34.75	2,136.85	412.82	261.63	488.33	1.26	-0.38	3.36
2,308.00	20.84	34.40	2,224.75	440.24	280.53	521.63	0.23	0.19	-0.37
2,403.00	20.05	32.73	2,313.77	467.89	298.88	554.81	1.03	-0.83	-1.76
2,496.00	19.37	32.28	2,401.32	494.34	315.74	586.15	0.75	-0.73	-0.48
2,591.00	18.73	31.24	2,491.12	520.70	332.06	617,11	0.76	-0.67	-1.09
2,647.00	18.55	31.33	2,544.18	535.99	341.35	634.98	0.33	-0.32	0.16
TIE ON									
2,746.00	17.38	29.66	2,638.35	562.29	356.86	665.43	1.29	-1.18	-1.69
FIRST MWD	SURVEY								
2,841.00	15.24	29.73	2,729.52	585.47	370.07	692.00	2.25	-2.25	0.07
2,935.00	14.65	28.06	2,820.34	606.69	381.79	716.12	0.78	-0.63	-1.78
3,030.00	14.50	28.83	2,912.29	627.71	393.18	739.88	0.26	-0.16	0.81
3,124.00	14.19	27.45	3,003.36	648.24	404.16	763.02	0,49	-0.33	-1.47
3,219.00	13.81	27.33	3,095.53	668.65	414.74	785.81	0.40	-0.40	-0.13
3,313.00	12.56	30.33	3,187.05	687.44	425.05	807.13	1.52	-1.33	3.19
3,408.00	11.19	31.08	3,280.02	704.25	435.03	826.63	1.45	-1.44	0.79
3,502.00	11.75	33.58	3,372.14	720.03	445.03	845.30	0.80	0.60	2.66
3,597.00	11.75	36,58	3,465.15	735.86	456.14	864.64	0.64	0.00	3.16
3,691.00	10.69	33.70	3,557.36	750.80	466.68	882.92	1.28	-1.13	-3.06
3,786.00	9.94	31.83	3,650.82	765.10	475.90	899.92	0,86	-0.79	-1.97
3,880.00	7.38	29.70	3,743.74	777.24	483.17	914.04	2.74	-2.72	-2.27
3,975.00	5.19	27.83	3,838.16	786.34	488.20	924.38	2.32	-2.31	-1.97
4,069.00	4.88	29.83	3,931.80	793.57	492.17	932.59	0.38	-0.33	2.13
4,164.00	3.25	28.83	4,026.56	799.43	495.48	939.29	1.72	-1.72	-1.05
4,258.00	1.94	31.70	4,120.46	803.12	497.60	943.53	1.40	-1.39	3.05
4,353.00	1.44	36.95	4,215.42	805.44	499.16	946.33	0.55	-0.53	5.53
4,447.00	1.13	40.95	4,309.39	807.08	500.48	948.43	0.34	-0.33	4.26
4,542.00	0.94	52.45	4,404.38	808.27	501.71	950.11	0.30	-0.20	12.11
4,636.00	0.56	66.33	4,498.37	808.92	502.75	951.23	0.45	-0.40	14.77
4,731.00	1.38	63.95	4,593.36	809.61	504.20	952.63	0.86	0.86	-2,51

Survey Report

Company: Project:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N UINTAH_MORGAN STATE 921-36P PAD

Site: Well: MORGAN STATE 921-36P1BS MORGAN STATE 921-36P1BS

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Well MORGAN STATE 921-36P1BS 26' RKB + 5010' GL @ 5036.00ft 26' RKB + 5010' GL @ 5036.00ft

True

	MORGAN STATE 9 MORGAN STATE 9			Survey Ca Database:	lculation Meth		Minimum Curva edmp	ature	
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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,919.0	00 1.13	83.33	4,781.31	810.83	508.20	955.90	0.29	-0.19	10.51
5,014.0	00 1.38	87.58	4,876.29	810.98	510.27	957.21	0.28	0.26	4.47
5,109.0	00 1.38	102.20	4,971.26	810.79	512.53	958.34	0.37	0.00	15.39
5,203.0	00 1.31	120.45	5,065.23	810.01	514.56	958.86	0.46	-0.07	19.41
5,297.0	00 1.50	122.45	5,159.21	808.80	516.53	958.99	0.21	0.20	2.13
5,392.0	00 1,63	127.33	5,254.17	807.32	518.65	958.97	0.20	0.14	5.14
5,486.0	0.75	243.08	5,348.16	806.23	519.17	958.37	2.20	-0.94	123.14
5,580.0	00 1.69	304.20	5,442.14	806.73	517.47	957.82	1.58	1.00	65.02
5,675.0	00 1.19	307.08	5,537.11	808.11	515.53	957.84	0.53	-0.53	3.03
5,769.0	0.88	299,45	5,631.09	809.05	514.12	957.82	0.36	-0.33	-8.12
5,863.0	0.63	277.70	5,725.08	809.48	512.98	957.52	0.40	-0.27	-23.14
5,958.0		253,58	5,820.08	809.38	511.91	956.83	0.30	0.06	-25.39
6,052.0		231.45	5,914.07	808.94	511.01	955.95	0.29	-0.14	-23.54
6,147.0	00 0.63	217.83	6,009.07	808.24	510.33	954.99	0.17	0.07	-14.34
6,242.0		210.95	6,104.06	807.29	509.69	953.85	0.15	0.13	-7.24
6,336.0		192.08	6,198.05	806.16	509.24	952.66	0.26	0.00	-20.07
6,431.0		179.58	6,293.04	804.72	509.12	951.41	0.33	0.26	-13.16
6,525.0		173.45	6,387.03	803.04	509.22	950.09	0.13	0.06	-6.52
6,619.0	00 1.06	167.83	6,481.01	801.33	509.50	948.84	0.11	0.00	-5.98
6,714.0		42.45	6,576.01	800.77	509.97	948.65	1.48	-0.59	-131.98
6,808.0		41.58	6,670.00	801.38	510,52	949.46	0.01	0.00	-0.93
6,903.0		83.95	6,765.00	801.74	511.21	950.15	0.38	0.00	44.60
6,998.0		113.95	6,859.99	801.57	512.10	950.52	0.34	0.14	31.58
7,092.0	0.50	252.08	6,953.99	801.23	512.18	950.29	1.12	-0.14	146.95
7,186.0	88.0 00	164.70	7,047.99	800.41	511.98	949.50	1.06	0.40	-92.96
7,281.0		146.20	7,142.97	798.85	512.75	948.65	0.53	0.39	-19.47
7,375.0		142.70	7,236.95	797.18	513.94	947.96	80.0	0.00	-3.72
7,470.0		144.33	7,331.93	795.72	515.02	947.37	0.33	-0.33	1.72
7,564.0	00 1.38	143.58	7,425.91	794.18	516.14	946.75	0.47	0.47	-0.80
7,659.0		139.95	7,520.88	792.23	517.69	946.03	0.28	0.26	-3.82
7,753.0		137.33	7,614.83	790.04	519.63	945.33	0.34	0.33	-2.79
7,848.0		134.58	7,709.78	787.69	521.90	944.69	0.12	0.06	-2.89
8,037.0		135,08	7,898.70	783.84	525.77	943.74	0.37	-0.37	0.26
8,225.0	00 1.94	148.58	8,086.62	779.61	528.95	942.07	0.39	0.34	7.18
8,414.0		147.70	8,275.49	773.56	532.72	939.24	0.23	0.23	-0.47
8,509.0		122,58	8,370.44	771.42	534.51	938.50	1.57	-1.39	-26.44
8,603.0		3.33	8,464.44	771.26	535.26	938.80	1.37	-0.72	-126.86
8,698.0		345.83	8,559.43	772.49	535.05	939.69	0.82	0.79	-18.42
8,792.0	0.69	351.70	8,653.42	773.94	534.74	940.71	0.48	-0.47	6.24
8,887.0		326.20	8,748.41	774.96	534.36	941.33	0.31	-0.04	-26.84
8,981.0		229.20	8,842.41	775.03	533.63	940.97	1.07	0.04	-103.19
9,170.0		170.08	9,031.40	773.67	532.88	939.43	0.31	-0.16	-31.28
0.450.0	0.00	142 71	0.211.20	770.00			0.04		

9,450.00

LAST MWD SURVEY

0.90

143.71

9,311.38

534.34

938.05

0.21

0.19

770,98

-9.42

Survey Report

Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site:

UINTAH_MORGAN STATE 921-36P PAD

Well: Wellbore: MORGAN STATE 921-36P1BS
MORGAN STATE 921-36P1BS

Design:

MORGAN STATE 921-36P1BS

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well MORGAN STATE 921-36P1BS 26' RKB + 5010' GL @ 5036.00ft

26' RKB + 5010' GL @ 5036.00ft

North Reference:

True

Survey Calculation Method:

Minimum Curvature

Database:

edmp

Survey

Measured Depth Inc (ft)	lination (°)		Vertical Depth (ft)		+E/-W	Vertical Section (ft)	Dogleg Rate	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,510.00 PROJECTION TO	0.90 OTD	143.71	9,371.37	770.22	534.90	937.74	0.00	0.00	0.00	

Design Annotations					
Meas		ertical		oordinates	
Der (fi	and the first of the second of the second	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
2,6	647.00	2,544.18	535.99	341.35	TIE ON
2,7	746.00	2,638.35	562.29	356.86	FIRST MWD SURVEY
9,4	450.00	9,311.38	770.98	534.34	LAST MWD SURVEY
9,5	510.00	9,371.37	770.22	534.90	PROJECTION TO TD

Checked By:	Approved By:	Date: